UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of: *
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ENBRIDGE OIL SPILL *
MARSHALL, MICHIGAN * Docket No.: DCA-10-MP-007
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Interview of: DARIN PARSONS

Crowne Plaza Hotel
Edmonton, Canada

Friday
December 17, 2010

The above-captioned matter convened, pursuant to notice.

BEFORE: MATTHEW NICHOLSON
Investigator-in-Charge

APPEARANCES:

MATTHEW NICHOLSON, Investigator-in-Charge
National Transportation Safety Board
Office of Railroad, Pipeline, and Hazardous Materials Investigations
[redacted]

RAVINDRA CHHATRE, Accident Investigator
National Transportation Safety Board
Office of Railroad, Pipeline, and Hazardous Materials Investigations
[redacted]

BRIAN PIERZINA, Engineer
[redacted]

JAY JOHNSON, Senior Compliance Specialist
Enbridge Energy Company, Inc.
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KAREN BUTLER, Supervisor of Accident Investigation
[redacted]

CURT GOESON, Control Center Supervisor
[redacted]

I N D E X

I N D E X

I N T E R V I E W

MR. NICHOLSON: Good morning. Today is Friday, December 17th, 2010. My name is Matthew Nicholson, and I am an investigator with the National Transportation Safety Board in Washington, D.C.

We are currently in Edmonton, Canada, at the Crown Plaza Hotel. We are meeting in regards to the plant-wide spill in Marshall, Michigan, that occurred on the 25th of July 2010.

This is Case Number DCA-10-MP-007.

Before we begin, Darin, I'd like you to state your full name and whether we have the permission to record this interview.

MR. PARSONS: My name is Darin Parsons, D-a-r-i-n P-a-r-s-o-n-s, and you do have permission --

MR. NICHOLSON: Okay.

MR. PARSONS: -- to record this conversation.

MR. NICHOLSON: Also, if you'd like, you are permitted to have one other person present during these interviews. This is a person of your choice, friend, family, supervisor, nobody at all. Please confirm for the record whom you have chosen to be that person?

MR. PARSONS: I've chosen Mr. Curt Goeson to attend.

MR. NICHOLSON: Okay. At this point I think we'll go around the room. We'll have each person introduce themselves. State your name, spelling of your name, the organization you represent, your title, and business email or phone number that we

can reach you at. I'll start. We'll go to my left.

My name is Matthew Nicholson, M-a-t-t-h-e-w N-i-c-h-o-l-s-o-n. I'm with the NTSB in Washington, D.C. I am an investigator, and my contact information is [redacted]

MR. CHHATRE: My name is Ravie Chhatre. That's spelled R-a-v-i-n-d-r-a, last name Chhatre, C, Charlie, h, Harry, h, Harry, a, apple, t, Tom, r, Robert, e, Edwards. I'm accident investigator with National Transportation Safety Board, Washington, D.C. My email is [redacted], and I'm here to assist IIC Matt Nicholson.

MR. PIERZINA: And I'm Brian Pierzina, an engineer with the PHMSA [redacted]. That's B-r-i-a-n P-i-e-r-z-i-n-a, and my email is [redacted].

MR. NICHOLSON: Go to you, Darin.

MR. PARSONS: Oh. My name is Darin Parsons, D-a-r-i-n P-a-r-s-o-n-s. I'm with Enbridge Pipelines as a shift lead.

MR. JOHNSON: And Jay Johnson, Senior Compliance Specialist in the Pipeline Safety Compliance Group for Enbridge in [redacted], [redacted] and that's [redacted]

MS. BUTLER: I'm Karen Butler with the [redacted]. I'm the supervisor over accident investigations. My email address is Karen, [redacted],

MR. NICHOLSON: Okay. And, Darin, I don't think we got contact information from you on the record.

MR. PARSONS: No, sorry. My email address is [redacted]. That's [redacted].

MR. NICHOLSON: Okay. Thank you.

Karen, at this time, we don't have Curt in the room if you'd like to go ahead and ask your questions.

MS. BUTLER: Okay.

INTERVIEW OF DARIN PARSONS

BY MS. BUTLER:

Q. Darin, I just need to explain to you what this is about to start off with and that is we're going to be asking you some general questions about supervision and leadership, maybe a little bit about your roles and responsibilities, a little bit about what a shift lead does. And we want you to have the freedom to answer that without your supervisor in your room. And it's my understanding that you do report directly to Curt, right?

A. That is correct.

Q. Okay. Now, just so you have a matter of process and that you're clear about that, should you say anything that could be viewed later as being sensitive to your job position or like if you were to say something as leadership and you're worried about being held accountable for that or in some way penalized for that, we do have the option of redacting part of the transcript, and

what I mean by that is we don't take it out, but we make it so it's not visible. All right?

A. Okay.

Q. Okay. So, the other question I would ask -- I would say, or ask you and let you know is that if you have any concerns about Jay being in the room as an Enbridge representative, you're free to let us know at this time.

A. No, no reservations.

Q. Okay. All right. So, with that we'll just start out with a couple of questions.

Do you view the MBS analysts as experts in hydraulics?

A. No.

Q. What do you view the MBS analysts as?

A. Well, I guess from a shift lead perspective, each analyst obviously brings something different to the table, and based on their years of experience whether they've been in the control center or have directly just become, came into the MBS analyst role. But to answer your question, Karen, their role there is to monitor the volume in balance on your line and you notify us of what they find when we do receive an alarm.

Q. Okay. So, what do you view your responsibility in the control room as?

A. As a shift lead in regards to an MBS alarm, Karen?

Q. Actually, let's just say --

A. Or --

Q. -- in general.

A. In general? Okay. My rule, the way I view it as a shift lead I'm there to first and foremost be a people leader to the operators in the room and then also provide support where needed, whether that's technical support, whether that's, I guess support as a leader with personal issues or anything that is involved in the control center.

Q. Okay. And have you operated 6B before? You may have told us previously, I've just forgotten.

A. No, I haven't.

Q. Okay. And when an MBS alarm does come in, what is your understanding of how the procedures should work?

A. My understanding of the procedure, when we receive a MBS alarm, the operator is to notify the shift leads. The shift leads would quickly view the trends that are available to us through the MBS system and from our side of things. If it doesn't look like it's recovering, we are to notify the MBS analyst and they are to review it from their end.

Q. Okay. So, if an MBS analyst comes back with the diagnosis of column separation or the indication of column separation, what would you do with that, traditionally?

A. If the diagnosis is column separation? Then we --

Q. Right.

A. We would calculate, try to calculate the volume on how much it would take to put the column back together.

Q. Is that something you would have done prior to Marshall as well as after?

A. You mean like, I'm sorry, months before or like traditionally?

Q. Yes.

A. Yes.

Q. Okay. All right. So, regarding technical information, what training have they given to you to technically perform in your position?

A. There was no formal training in our position as shift leads for our position. A lot of the training and experience came from operating terminals and pipelines prior to.

Q. So, since normally we would know a little bit more going into an interview, and I apologize for not recognizing whether your background was terminals or pipeline, could you give me a little history on your background?

A. Sure. Predominantly, my experience would be terminals. I spent four or five years on a terminal system with some small pipelines attached to the system, very small, and I spent a year operating gas facilities, more pipelines, not terminals. And then I moved over to pipelines for a year, Enbridge pipelines for a year and operated there.

Q. And as a shift lead you do rotate, right, between pipeline and terminals, or --

A. That's correct.

Q. Okay. All right. Regarding your supervision, when you needed technical support in various aspects, do you feel that when you go to your supervision for that technical support you receive it?

A. I, personally, Karen, haven't really gone to our supervisors for technical support. We really rely on each other for support, and when I say each other, I mean the other shift leads, as well as our technical analysts during our admins, or sorry, on our admin staff, you know, if we needed any technical support we would go to them.

Q. Okay. So, do you consider certain operators in the room part of your technical support as well?

A. Yes, I do.

Q. Are there certain operators on certain shifts that you consider aces or that you would frequently go to with a question?

A. Yes, I do.

Q. Can you tell me who they are?

A. Oh, off the top of my head I can -- Dean Cavsant is one. He's very strong.

MR. NICHOLSON: Can we get the spelling on that, Darin?

MR. PARSONS: Dean, D-e-a-n, Cavsant, C-a-v-s-a-n-t. Oh, putting me on the spot here. I can't, yeah, I --

BY MS. BUTLER:

Q. That's okay. If that --

A. I don't -- I think every shift, Karen, just to answer

that, every shift would, you know who would be your technically stronger operators and you would tend to lean on them.

Q. Okay. Do you think there's a common characteristic with those type of people?

A. Yes.

Q. And what do you think that common characteristic is?

A. Thorough.

Q. Okay. So, does thorough mean to you that they check into all the details?

A. Yeah. They --

Q. Okay.

A. They, I guess they don't stop learning.

Q. Okay. So, if they were to have a typical shutdown and an MBS alarm of five minutes and then that cleared, would they traditionally go farther, or does it just depend on the pipeline they're on?

A. That's hard to answer, I guess, Karen, because, you know, we don't typically see them operate and watch what they do after say an MBS alarm.

Q. Okay.

A. I could suspect or, you know, that they would go farther, but, you know, that's all speculation.

Q. That's fine.

MR. NICHOLSON: Karen, I'm going to jump in here. Are you finished with questions that might be sensitive to Curt's

presence?

MS. BUTLER: No, headed into it.

BY MS. BUTLER:

Q. So, based on what happened on that particular Marshall event, were there significant changes in the control room?

A. Sorry, say that again, Karen.

Q. Based on what happened in Marshall, as of Marshall, have there been significant changes in the control room?

A. To be honest I can't comment on that, Karen. I've been removed from the control center since the incident in Marshall.

Q. Okay.

A. So, I haven't been a part of that since --

Q. Okay. How was that explained to you?

A. How -- why I'd been removed?

Q. Right.

A. I'd been removed just for investigative purposes.

Q. Okay. And do you know, was there any investigation at all that happened prior to you being removed?

A. Not that I'm aware of, no.

Q. Okay. Regarding your particular job, do you perform performance reviews?

A. Yes, I do.

Q. Okay. And on your performance review, what are some metrics that you look at to evaluate the controllers that report to you or you would be asked to evaluate?

A. We would look at a range of things and I guess from a high level we'd break it down to what they do, and that would be more of the technical work. Their, you know, their performance and how they do, and that would be their personality, their response, their, whether they're positive or negative in the control center, you know. Are they supportive of Enbridge values, those types of things.

Q. Okay. And how are you evaluated? On what metrics are you evaluated?

A. I would believe I'm evaluated the same way based on technical skills and, or, sorry, based on my what and my how. And my what and my how would probably be different than what an operator has for theirs.

Q. Okay. Are there categories in those what and hows?

A. Yeah, there's just competencies that we go through, you know. It's your job profile. Is it your technical skills, communication skills?

Q. Are those weighted differently?

A. No.

Q. Okay. So, each one would have equal value in as far as your overall rating.

A. Yes.

Q. Okay. And do those feed into a bonus structure?

A. Yes, they would.

Q. Okay. And with that then I think that we have all but

one question where we can bring Curt back in the room, okay?

A. Sure.

Q. Take a deep breath. And that would be regarding supervisory changes or shift lead changes, is there anything that you recommended as an enhancement or that you think would say take the control room to the next level?

A. I think from a shift lead enhancement, having, I guess having more of a defined role. I really find that it was, and to this day is still clouded to some extent as to what our actual position is. The job in years past was very technical, and the job as I understand it is more, or less technical and more people orientated, more coaching, and I really feel that you need a very strong balance between the technical role as well as the people role and having the shift lead perform both roles is very, I guess, hard to do.

Q. Is workload a part of that?

A. Absolutely.

Q. Okay. So, are you overloaded?

A. Yes.

Q. Okay. Based on what you've just said about shift leads being a live coach and it's my understanding that several controllers are no longer in the control room as well, are you guys kept together on common projects, those of you that are not in the control room any longer?

A. No, we're not.

Q. Is anybody being your live coach now?
A. I guess it would be Curt. If I have anything to talk to, I talk to Curt about it, as my supervisor.
Q. Okay. Have you been asked to continue your role as live coaching through this difficult time for the other controllers?
A. No.
Q. Okay.
MS. BUTLER: I'm done with my supervisory. So, you can bring Curt back in.
BY MS. BUTLER:
Q. Thank you very much.
A. Thanks, Karen.
MR. JOHNSON: And Curt is on his way over and we can continue along as long as Darin is okay with that.
MR. PARSONS: I'm fine.
MR. JOHNSON: Okay.
MR. PARSONS: I'm comfortable.
MR. NICHOLSON: You can proceed, Karen, you've got 20 minutes.
MS. BUTLER: Okay, you want me to continue, or --
MR. NICHOLSON: Yes, go right ahead, why don't you?
MS. BUTLER: Okay.
BY MS. BUTLER:
Q. So, regarding things that happened on Marshall in that particular day, is there anything that you would tell us should be

implemented, because our overall goal is to make sure that the public is safer as a result of this investigation, but also to make sure that you as controllers and shift leads are put in a position to have greater success as a result of this investigation.

So, is there anything that comes to mind that you would I guess only say, you know, if we had implemented this or if we had changed the specific aspect of what we do could have helped the situation on that day? Meaning by helped that you could have recognized a leak in a quicker fashion?

A. That's a tough one to answer because obviously there was several things that probably didn't go as it should and, yeah, I, you know, to make any recommendations or changes, I think there was -- communication comes to mind. I think just a lack of communication, you know, whether it was from the field or from external parties that happened to receive phone calls or whether it was internal, communication really comes to mind for me.

Q. Okay. Is there anything else that --

MR. NICHOLSON: Karen, I'm going to interrupt for a second. Curt is in the room. I want to get him on tape if we could.

MS. BUTLER: Great.

MR. NICHOLSON: Curt, can you introduce yourself?

MR. GOESON: I'm Curt Goeson, control center supervisor, Enbridge Pipelines, Contact Information. Curt, C-u-r-t, dot

Goeson, G-o-e-s-o-n, @ enbridge.com.

MR. NICHOLSON: Okay. Thank you. Go ahead Karen.

BY MS. BUTLER:

Q. Okay. So, in communication, just working to improve that, I take it from your answer you meant both external and internal.

A. Yes.

Q. Is there anything else that comes to mind that, you know, when we look at hazards and barriers, you try to put up a barrier for every recognized hazard so to speak so that they can't slip through and accumulate in an accident. So, from that perspective, what else do you think could have been put in or could be implemented as a barrier to prevent what happened from happening again?

A. Well, I think just looking at it now, you know, I guess more clear checklist or, you know, something to look at. I mean we have procedures, we have -- and they're there for a reason. However, you know, almost a formal checklist would certainly help.

Q. Do you mean between shifts or do you mean between shifts and other ways, too, or --

A. No, I think in general every shift or, you know, much like a procedure. I think having something in place where, you know, have you checked this, have you checked that, you know, when you do receive an MBS alarm or when you suspect a leak or when you encounter an issue or anomaly on your pipeline, having that

checklist, you know, a very detailed, thorough checklist.

Q. Okay. So, could that translate to more detailed procedures, or is that an incorrect interpretation of what you might just have said?

A. No, it would be more detailed procedures.

Q. Okay. And anything else come to mind before we change topic areas.

MR. JOHNSON: Maybe let me ask something, Karen, and it goes right into your questioning that I didn't quite understand of Darin.

BY MR. JOHNSON:

Q. As you said better communications internal and external, I'm just curious as what do you mean by external?

A. I think just the communication, you know, another pipeline company received phone calls in regards to --

Q. Oh.

A. -- an order call and yet they weren't calling us or other pipelines in the vicinity saying that we were receiving an order call. So --

Q. Yeah, I think that we would kind of all agree with that.

A. Right.

Q. I just wasn't quite sure what you mean there.

A. Yeah.

Q. If you, you know, I just, when I said external I didn't know if you meant your station technicians and stuff like that,

but that answers the question.

MR. JOHNSON: So, go ahead, Karen. Sorry.

MS. BUTLER: No, no problem, Jay.

BY MS. BUTLER:

Q. Along those lines since Jay asked for clarification, we'll just head on that path a little bit. Do you know if in the past you've had better communication between say gas pipelines or liquid pipelines in the area?

A. Yes. Yeah.

Q. Was it in a similar location that you're aware of?

A. Not that I'm aware of, Karen.

Q. Okay. That's fine. All right. Is there anything else about the external or internal communications that we could learn from you on in this particular aspect?

A. I think when we talk about shift leads and their roles and responsibilities and I think you guys are aware that, you know, each shift lead kind of has their own responsibilities, a given shift, and we do help out and support each other. When things like this happen, I think defining a clear cut leader or someone to take the reigns on that, you know. We, Aaron and myself, we both did bits and pieces of the investigation and looked at it, but I think having one direction and -- I shouldn't say direction, one leader throughout that process, taking over, making sure that, but, and that's strictly from a shift lead perspective.

Q. Okay. So, let me see if I can paraphrase that well and I'm just testing my understanding of what you said, okay?

A. Sure.

Q. Not worried at all with any of the words you used. I just want to make sure that I walk away with a clean understanding of that.

I think what you're telling us is when you're doing communications about -- on a significant issue, the more you can keep a same group together as they work through that issue the less chance there is of miscommunication. Is that a fair summary of what you were at, or is there more to the equation than I understood there?

A. No, that would be fair, Karen.

Q. Okay. All right. So, as the shift lead, do you frequently review pressures and flows?

A. Not frequently, no, just when we need to get involved in an incident or, you know, for investigative purposes.

Q. Would it have standardly been something when you shut down a pipeline that you look at the pressures associated with that shutdown?

A. Not unless the operator got us involved.

Q. Okay. And so based on your understanding of how it really works in the control room, when do you think and operator would get you involved on a shutdown?

A. If they suspected, you know, something that was

abnormal, unexplainable to them.

Q. Okay. All right. And did any of that occur on this particular shift for you? Did anybody bring anything like that to your attention?

A. After the startup, the first startup.

Q. After the first startup. Can you talk me through that event?

A. After the first startup we, when I say we, Aaron Zimmell and I, received a phone call from one of the operators, Mr. Tim Chubb, saying that they had tried starting up, or they were starting up the line and received a ten minute MBS alarm and that he was at his ten minutes and that's my first knowledge of anything that was abnormal that night.

Q. Did you have any information from the previous shift handed to you?

A. No.

Q. Okay. So, you weren't aware of all of the column separations that had occurred at the shutdown prior to your shift?

A. That's correct.

Q. Okay. Is liquid fraction display something you would traditionally review when you come in and try to get acclimated?

A. No.

Q. Okay. What do you do when you first come in on shift to kind of get a feel for all the pipelines or terminals in the room?

A. We just take a rundown from the other shift lead that

was on the shift previous and they would just highlight -- usually we write down this information on a piece of paper of the, some of the things that went on that shift and we would just review it verbally and if things had to be explained using our SCADA system, then we would go through that.

Q. Has the liquid fraction display ever really been explained to you?

A. Not -- no.

Q. Do you traditionally use it as a tool at all?

A. I don't.

Q. Okay. All right. So, if I understand this right, the previous shift lead didn't really pass you any information on the fact that the shutdown had an MBS alarm after it. So, when you would go to the next shift, did you pass on issues associated with MBS alarms?

A. Yes, I did.

Q. Okay. Now, if an MBS alarm had come in and cleared, would you have traditionally passed that on to your next shift lead?

A. Traditionally, no.

Q. Okay. Is that something that has changed now?

A. I'm not aware of --

Q. Okay.

A. -- any changes right now, Karen.

Q. All right. That was unfair. Sorry, I forgot. All

right. The priority associated with alarms, have you ever had any input into whether a particular alarm is a priority 4 or priority 8 or --

A. I'm not too sure I understand what you're referring to. Like the severity of a type of alarm we receive?

Q. When you get an alarm, you know, it'll say beside the alarm descriptor as it comes in the cue --

A. Yeah.

Q. You know, it'll say F8, F4, F7, F6.

A. Yeah.

Q. So, have you ever had any input into how those particular alarms are categorized?

A. No.

Q. Okay. Have you ever had any input into when a string of words comes in, I call that the descriptor for a particular alarm or event, have you ever had any input into what's said in that text?

A. Only from -- only on terminals.

Q. Okay. All right. Have you ever noticed any time discrepancy? And I'm going to explain that. The time discrepancy I'm specifically talking about would be where say you have an event or an alarm that shows up and it has a time stamp but you didn't necessarily see it at that time stamp. And what I mean by see it is I don't mean that you just didn't have a chance to look at it, I meant that say a color change on another screen or the

fact that it was displayed at all in the alarm cue didn't seem to coincide with the timing on that time stamp.

A. No, Karen.

Q. Have you ever seen -- you traditionally watch any starts or stops free of the operators?

A. Yes, not only -- I only will view a startup if I know that there was something wrong or if I was involved with it, I would typically go, but in general on any given day when they're, when the mainline operators are starting and stopping their lines, I don't typically follow it.

Q. Okay. Have you noticed in the past anything in those events that you did do where say the console operator might send a command that something in the field had already happened, like, for example, a unit had shut down on those sections that they had send a stop command from the console at almost the same time?

A. No, I have never seen it unfold real time, but looking back at previous incidents or when we're doing investigations, I've seen it.

Q. Okay. So, can you think of an investigation where you did see it?

A. No, Karen.

Q. Okay. All right. All right. So, have you noticed on your particular shift as the shift lead, anything that would say in the alarm cue system, might say our track (ph.) too busy to process?

A. No.

Q. Okay. Have you traditionally seen alarms in the alarm cue that say things like, I'm thinking about the LPM system and it might say that it had invalid pressures?

A. No. You know, typically, Karen, the shift leads won't be viewing the alarm displays. So, we wouldn't be receiving that. The operators would be receiving those, but --

Q. Okay.

A. But I have -- was never informed of any of those --

Q. Okay.

A. -- those type of words.

Q. So, an operator didn't traditionally bring those to your attention.

A. No.

Q. Okay. All right. Do you know, has an operator every brought to your attention that he's had to reboot a particular system?

A. Yes.

Q. Okay. Have you had to reboot systems?

A. Yes, I have.

Q. Do you know what causes that?

A. Not specifically. I know it's just one of those things where a system just needs to be rebooted just to kind of refresh. No technical explanation given from SCADA or anything on that, but it's one of those things where they just need to be refreshed.

Q. Okay. And have you ever been given any guidance on under what circumstances or when you should be entering any changes to pressure allowable limits?

A. The only time that I'm aware of of when we change our pressure allowables --

Q. Um-hum.

A. -- is when there's nothing happening on the lines. So, no pumps are being started. The line is not being started up. And it's, you know, you have the time, you have the resources to do it without impact.

Q. Okay. So, do you think that's something that's been commonly understood between shift leads, or do you have any knowledge of that?

A. I think it's commonly understood by the shift leads.

Q. Okay. All right. So, based on, I think the information that you've provided, and I greatly appreciate it, there's really only one other question I have, and that would be on the internal investigation, were you interviewed by Enbridge in the internal investigation?

A. Yes, I was.

Q. Okay. And was that transcribed, to your knowledge, or recorded?

A. I believe it was recorded.

Q. Okay. Now, I think that's all I have. Thank you very much.

A. Thanks, Karen.

MR. NICHOLSON: Brian, do you want --

MR. PIERZINA: Yep, you bet.

BY MR. PIERZINA:

Q. Just to back up, Darin, a little bit, you had mentioned that if call on separation -- if you have a call on separation, you try to calculate a volume to put it back together, how often would you do that? Give me a sense for how often you might have to do that.

A. Maybe once or twice every couple of weeks.

Q. Okay. So --

A. Yeah, like from a column separation usually the operators would have calculated that, but as a shift lead, we typically wouldn't get involved with the calculations of --

Q. Okay. So, that's something the operators, you would expect most operators do.

A. Yeah.

Q. And if one was unsure, you might help him.

A. Absolutely.

Q. Okay. And also just to back up a little bit, on a shift change, so if you're taking the F&CC end of the control center, you do your rundown with the person that was doing the F&CC, is that how that works?

A. Yes.

Q. So, in your shift change going on from Sunday night to,

or Sunday afternoon to Monday, or Sunday night, you probably wouldn't have talked anything about the line 6B shutdown, right, because that was the other --

A. That's correct.

Q. -- shift lead's. Okay. Who was the shift lead you took pass down from?

A. Hollister Ewing (ph.).

Q. Okay. I don't know the right way to ask this question, but from your understanding if an MBS alarm clears, does that mean that the problem has gone away?

A. In my understanding, if the MBS alarm clear, it is because it's explained. So, it, like so in the model, so if it can calculate pressure or flow on a line, that it's accounted for.

Q. Okay. So, basically, if the model doesn't detect an imbalance, then it's okay.

A. That's correct.

Q. All right. So, does it say anything about why the alarm began in your mind?

A. Something on the model -- there's an imbalance on the system and that's why the alarm does come in.

Q. Okay.

A. So, something has to trigger that. So, whether it's a pressure, a flow, something has caused that alarm. So, that's my view of it is, you know, what has happened on that system. It is alarmed and then view it.

Q. Okay. Thanks. Were there any coincidental alarms or issues going on that you were dealing with beyond the 6B restart issue?

A. With 6B in particular?

Q. Oh, no, just --

A. In general.

Q. -- in general, you know, with all the other consoles and --

A. Not that I'm aware of, no.

Q. Nothing that you're --

MR. PIERZINA: All right. I think I'll pass it on.

MR. NICHOLSON: Okay. Ravie.

BY MR. CHHATRE:

Q. On the day of the accident, how was your workload or classify that to your other days.

A. The workload of my shift that night was fairly light.

Q. As you mentioned previous, Lee did not tell you there was a mass balance alarm and it cleared out, but then you also mentioned that when mass balance alarm clears out, you wouldn't be passing that out to your next person either.

A. No.

Q. Is that pretty standard procedure or somehow practice commonly expected?

A. Yeah. Quite often we wouldn't, you know, we would hear that it cleared and we'd just leave it after that.

Q. So, what kind of information will be passed on the next lead?

A. Did I pass on?

Q. No, I say what kind of information is --

A. Oh.

Q. -- passed on?

A. Just, I guess with technical, any technical things that went on, whether there was certain instructions for pipelines that we needed to follow for the night, whether there's a peg run or we were tracking a batch, sampling requests; just small things that needed to be passed on that's just kind of gone higher than the operator level, just had more awareness. Things like that. Anything that was abnormal that went on, whether there was an older call or anything like that, we'd pass that information.

Q. Now, mass balance alarms, are they common or they are -- do you consider kind of an abnormal?

A. They're common.

Q. And as a lead, how familiar you are with like the lines or the operators reporting to you are working on, are responsible for.

A. I'm sorry, how familiar am I with the lines that --

Q. Your staff or your operators are responsible for.

A. Yeah. How familiar am I with those lines?

Q. Yes.

A. I'm familiar with two of the lines that I had operated.

Actually, sorry, three of the lines, but the other lines themselves I'm not familiar with it from a technical standpoint. I don't know all the stations on the pipelines. I don't know the elevation profile of all the pipelines. That would be my --

Q. In your opinion, what is the cause for the mass balance alarms?

A. In my opinion, an MBS alarm is the imbalance of your volume in and out of your line.

Q. And what would cause that in your opinion?

A. What can cause that? It could be -- you may not be getting the volume in and the volume out --

Q. So, that's --

A. It can be a leak. It could be a transmitter problem, whether it's --

Q. Um-hum.

A. -- a transmitter, it could be like a pressure transmitter. It could be --

Q. So --

A. -- a full transmitter.

Q. Equipment was bad is that was you're saying?

A. Pardon me?

Q. Equipment was bad?

A. Yeah, equipment. Yeah, equipment failure. It could be the wrong density.

Q. Equipment failure meaning the signals you are getting

are inaccurate or -- I'm sorry.

A. Yeah.

Q. I didn't quite get what -- how equipment failure can cause the mass balance. I'd like to understand that.

A. So, say if your MBS system uses a certain pressure transmitter somewhere on your line and that pressure transmitter fails due to -- it's too cold or it just happens to fail.

Q. Okay.

A. Then the transmitter no longer is part of the MBS balance and then it would trigger an alarm.

Q. So, would you consider that like a false alarm? Actually you don't have a --

A. Right. After investigation you find out the transmitter is out and, yeah, that would be a false alarm.

Q. All right. What else would trigger it?

A. It could be a leak. It could be equipment failure. It could be the density temperatures of --

Q. Okay.

A. -- your line. So, another transmitter, I guess.

Q. Okay.

A. If it fails, if the wrong density is entered. It could be DRA, drag reducing agent.

Q. Reducing, okay.

A. I mean that could affect it and give you an MBS alarm.

Q. And who is expected to investigate that and tell you

what's causing the mass balance?

A. I would expect the MBS analyst to be able to explain what the cause is and if it was a pressure, then we could get involved with the investigation.

Q. So, in your mind, the role of the -- I guess the MBS analyst is to investigate and find out what's causing the alarm that you have seen on the console.

A. Right. So, what, yeah. Yes.

Q. The reason I asked you that again because we were told by the analyst that we -- that basically they're only asked if the model is working or the model is not working.

A. Okay.

Q. Is root cause for the alarm, does that cause in the model would be in your opinion or is that more investigation than just model working.

A. I'm sorry, say that again Rav.

Q. Okay. You said you, in your opinion --

A. Yeah.

Q. -- you expect the --

A. Analyst.

Q. -- analyst to investigate the cause for the mass balance alarm.

A. Yeah.

Q. Like equipment failure or leak or drag --

A. Yeah.

Q. -- (indiscernible), I guess more or less whatever the reason may be or the transfusers (ph.), that kind of stuff, and you expect, in your opinion, the lead, you expect that the mass balance analyst would investigate that and tell you that all is good, bad, and the cause for it.

A. That's right. And if it was --

Q. And --

A. If it was a pressure problem or if they couldn't explain it, we would get involved further to investigate.

Q. Okay. And would you consider that investigation as part of telling them the model is working or the model is not working? In your opinion when analyst come --

A. Yeah.

Q. -- to you and tells you that, well, model is working, what does that mean to you?

A. If the model is working, then it, yeah, I guess I'm not too sure what --

Q. Well, I'm just repeat that.

A. Yes. Yeah.

Q. Because that I was told yesterday --

A. Right.

Q. -- that all the analysts consider their responsibility as --

A. Right.

Q. -- when the --

A. Whether to say --
Q. -- mass balance alarm comes --
A. -- it's working or not.
Q. -- here and this, everything else --
A. Yeah.
Q. -- is the operator's responsibility. What I hear you telling me as a lead --
A. Yeah.
Q. -- that you expect the mass balance analyst to come and tell you when you contact them, hey, I'm getting mass balance alarm.
A. Yeah.
Q. You would expect the specialist to come back and tell you, look, if a failure is causing it or no it looks like (indiscernible) or maybe some transfusers are a problem.
A. Right.
Q. And so I'm seeing that as a disconnect. I just want to make sure --
A. Yeah. No, that's --
Q. -- that I understand --
A. That's the way I've always approached that position.
MR. GOESON: May I?
MR. NICHOLSON: Curt has a comment to make. Go ahead, Curt. Just speak up.
MR. GOESON: You're referencing changes that have been

implemented in the communication since Darin has been gone.

MR. CHHATRE: No, I was not -- the people I talked to do not know what changes have been made. So, I'm not familiar with the changes that --

MR. NICHOLSON: Be more -- the changes that are made are --

MR. GOESON: The request to minimize the amount of information coming from the MBS analyst, whether the model is working or not, were implemented post 6B.

MR. CHHATRE: Okay. But I'm --

MR. GOESON: Post incident.

MR. NICHOLSON: But I'll add to that your procedure reads, and I believe --

MR. GOESON: Absolutely.

MR. NICHOLSON: -- it's the same procedure that was in place on the 25th that the analyst just simply calls the alarm valid or invalid, right? I mean nowhere in your procedure --

MR. GOESON: The alarm --

MR. NICHOLSON: -- does it say he'll offer more than just the --

MR. GOESON: That was the intent, yeah.

MR. NICHOLSON: Okay.

MR. GOESON: Yeah. What Darin is referencing is how they did it before.

MR. CHHATRE: Right. Pre-accident.

MR. GOESON: That's all. Yeah.

MR. CHHATRE: Yeah, pre-accident. That's where we are focusing right now, pre-accident. And you're telling me post accident that it's clear to the analysts that that's what they're supposed to be doing? They're getting the operators that would cause for the alarm?

MR. GOESON: No, just if the model is working or not.

MR. CHHATRE: So, that's -- now they are responsible for telling whether the model is working or not. Okay.

MR. GOESON: That's the intent, yeah.

MR. CHHATRE: Okay.

MR. GOESON: I'm sorry.

BY MR. CHHATRE:

Q. So, in the past, now I'm going back to, I guess, this lack of -- misunderstanding of the expectations, I guess, on both sides. In the past did the analyst come and tell you what's the cause for the alarm was or they never did?

A. In the past they did.

Q. They did come and tell what caused --

A. Not in this incident.

Q. No, not this incident.

A. But, yeah, but --

Q. I'm just saying --

A. Yeah, in the past, yeah, they would --

Q. In the past.

A. -- be able to tell us, yeah, it's a pressure transmitter at this location or it's a flow imbalance, you know. Your volume is calculated here differently than it's calculated here. It looks like this transmitter needs to be calibrated. They'd give you that --

Q. Okay.

A. -- kind of information.

Q. I don't know -- make sure I understand you right. You said they can, but they did, actually, in the past.

A. Yeah.

Q. Okay. And is, as a lead, do you believe there's the same expectations of the operators? Because some times the operators told of being contacted directly, the specialists.

A. Yeah. Sometimes they would contact the specialists directly, but we would still get that information.

Q. I understand --

A. They would get the same information that I would get.

Q. And I guess by calling, what I would recollect, in your opinion as a lead, is the same expectation is the operators that they may be told the reason for the mass balance?

A. I would expect the operators to get the same information that --

Q. You're lead --

A. -- that I would get.

Q. The operators.

A. Yes.
Q. Okay.
MR. JOHNSON: So, the question that Ravie, just so I make sure I understood it. You were asking Darin if the information he got from the analyst was what he would think that the analyst would give the operator?
MR. CHHATRE: No. What I was asking him is he expects the analysts to tell him the root cause of the mass balance alarm. And the question was, did he expect the same information to go to the operators if and when the operators contact directly --
MR. PARSONS: Yes.
MR. JOHNSON: Okay.
MR. CHHATRE: -- the analysts.
MR. JOHNSON: And I --
MR. CHHATRE: And the answer was yes.
MR. JOHNSON: Thank you.
BY MR. CHHATRE:
Q. Right?
A. Yeah.
Q. And how long you have been lead in this particular position?
A. Up to the incident itself, two and a half years.
Q. Okay. Do you recall getting the mass balance alarms in the Marshall location in the past?
A. No.

MR. JOHNSON: No you don't recall, or no --
MR. PARSONS: No, I don't recall every --
BY MR. CHHATRE:
Q. Recall. Okay.
A. -- getting it --
Q. I got that. Okay. He will recall.
A. No.
Q. Okay. When the incident happened you were told there was a mass balance alarm and it cleared in the shutdown --
A. I wasn't --
Q. You were not told.
A. I wasn't told that.
Q. So, the operator did not come back to you and told you that there was a mass balance alarm during the shutdown and it cleared itself.
A. Was it the original shutdown?
Q. The very first one.
A. Yeah, no, I wasn't told that.
MR. JOHNSON: He wasn't on that shift.
MR. PARSONS: I wasn't on that shift.
BY MR. CHHATRE:
Q. Oh, I'm sorry. Okay.
A. Yeah.
Q. My misunderstanding. Now, you consider mass balance alarms as, I guess important or critical and yet you said that is

the kind of information that would not be passed on to the next lead. Why was that?

A. Because we get a lot of them. So, we get a lot of MBS alarms on startups and shutdowns on many of our lines. So, the ones that can be explained isn't -- they happen daily.

Q. Okay.

A. So, we don't pass that information. If there was something abnormal that we felt was abnormal or we knew that was abnormal, we would pass that information on, but that typical information just, we just wouldn't pass on because it's more of an operator to operator information, not so much --

Q. Not --

A. -- a shift lead to shift lead.

Q. Shift lead. Okay. When the mass balance alarm is mentioned to you, do you go through all these options that you just mentioned earlier that can cause the alarm? In your mind go through this or do you discuss that with the operator?

A. I discuss with both the operator and the analyst --

Q. And have they --

A. -- and the --

Q. -- checked all these possibilities?

A. That's correct.

Q. And is leak typically mentioned in that process or not?

A. Not really, no. Like it's, I mean, I think it's always in the back of your head and you're always referring to it or you

think about it, but we're never bringing up is it a leak? Is it a leak, right? Is, you know, how can we explain this is usually the conversation that happens.

Q. Okay. Now, when you try to find out the root cause for the mass balance alarm, would you be going through the process of eliminating one at a time like you did a transfuser failure or there is a temperature or there is a drag reducing agent. How -- what is the process that you guys eliminate one at a time to find out --

A. We don't have a defined process that we actually go like or a checklist --

Q. Okay.

A. -- or anything like that, but we would just go through it and try to explain it.

Q. Go through each and eliminate --

A. Yeah, absolutely.

Q. -- one at a time? Okay.

A. Yeah.

Q. And how do you eliminate then the leak as a possibility?

A. You can't.

Q. Okay. I think you mentioned earlier that you guys don't have input in alarm classification, but who does? If you don't know, you --

A. No, I don't know.

Q. And nobody questioned as to, hey, you know, who does the

classification of the -- did anyone have any discussion with you?

A. Yeah, the alarms are already classified. So, you know, they've been implemented prior to. I've been involved with projects where -- I've been involved with classifying certain alarms and severities of certain alarms, and that's from the ground up.

Q. Okay.

A. So, something that's already been implemented, sure, there's times when you question descriptions in certain alarms or maybe severities, but it's not common.

Q. Okay.

A. It's, you know, it's been in place for a while and --

Q. In your opinion, are the classification, you agree with that they're valid or you have some reservations about some type of classification?

A. No, I've been -- I'm okay with classifications.

Q. In the mass balance alarms, is topography typically displayed when you look at the root cause for it from the operations viewpoint? You did mention that if (indiscernible) cannot be explained then you assign the operator, or you --

A. So, do we see the elevation --

Q. Yeah, the --

A. -- on --

Q. -- routine, root cause investigation for the mass balance alarms?

A. Yeah, we would look at them.

Q. In your opinion and experience, what causes the mass balance alarms typically?

A. Imbalance of --

Q. I mean besides the equipment failures and other --

A. Yeah. Imbalance of volume in versus volume out.

Q. And typically at occurrence of topography locations or certain --

A. Yeah, you, yeah, typically, you'll have, you know, not every line, but a lot of lines have certain elevations where based on our certain limits that we have, we have to almost drain the line off in order to prevent any type of overpressure. Yeah, you'd get an MBS alarm because you have column separation.

Q. And is there systematic effort done to eliminate that? Let me back up. Can that be eliminated at all by making any changes in operations?

A. I don't know typically. Like, I couldn't give you an answer. It would be very general in sense like that, but I think looking at it, obviously pressure allowables are there for a reason, for protection, and if it means draining off a line in order to make sure that you're protecting a certain section of pipeline during a shutdown, you know, it's there for safety reasons.

Q. So, I mean I guess you are going back to startup and shutdown.

A. Yeah.

Q. But the mass balance alarms come only during that time, or are they can happen in operation?

A. No, they can, yeah, typically they happen while you're starting up and shutting down.

Q. Okay.

A. Typically. When you're running the line and steady state you can get them.

Q. You can, right?

A. Yeah.

Q. If you have a classified 100 mass balance alarm that you received in last week --

A. Yeah.

Q. I'm just taking that as an example.

A. Yeah.

Q. How many of those will be during the startup and shutdown and how many of those will be operational? Give me the typical data.

A. Yeah. I would say 85, 90 percent are on startups and shutdowns.

Q. Okay.

A. And the rest of them would be steady state.

Q. Okay. And then the startup and shutdown can happen at any location. It doesn't -- it's not necessarily during the job like you're telling that when you're here today and complete a

(indiscernible) today.

A. They can happen at any location but typically happen at, you know, your --

Q. Yeah.

A. -- your typical locations, I guess on the pipeline. So --

Q. Okay. And are those (indiscernible) identified, told to the operator that we are more prone versus the others?

A. The operators would be very familiar with what type of MBS alarm they were going to receive on a startup or a shutdown. They'd be familiar with it, but --

Q. So, in your mind, did it occur to you unusual that it happened at Marshall, which is not at a, (indiscernible) looking at a high elevation?

A. I wasn't familiar with Marshall's elevation or the MBS alarm. So, to comment on that --

Q. Okay.

A. -- I don't know.

Q. Okay.

A. Yeah.

Q. I guess that's all I have.

A. Okay.

Q. Thank you so much --

A. Thanks, Rav.

Q. -- for your time.

BY MR. NICHOLSON:

Q. Okay. And I'm going to start by going over your transcripts because really my clarifications are in timeline as where your interaction on startup with Darin and the phone call with Blaine and even with Jim Knudson. So, I noticed in the transcripts and if you want a copy --

MR. NICHOLSON: Ravie, can you -- do you have a copy of --

MR. CHHATRE: Sure. Yeah.

MR. NICHOLSON: -- Darin's transcripts, just in case he wants to refer to it.

BY MR. NICHOLSON:

Q. On page 10 --

MR. CHHATRE: Just, give me a second.

MR. NICHOLSON: Well, if he needs them, we'll give them to him.

BY MR. NICHOLSON:

Q. On page 10 of your transcripts it says Aaron got the phone call from Tim saying we'd reached our ten minute rule and we had column sep suspected, you say column sep, suspected column sep, and we reached our ten minute rule and it hadn't filled in. What did you mean by suspected column sep? Can you have a suspected column sep? Or you either have it or you don't?

A. No, you can suspect a column separation if there's no pressure at a certain location. So, if you happen to drain off

your line then, and you know that you've drained off your line, it's a suspected column separation.

Q. Isn't that a column separation?

A. Well, it is, but you don't -- exactly. It is a column separation, but I guess suspected meaning versus leak. So, they --

Q. Oh, okay. So --

A. So they look at it as either a leak or suspected column separation, but if it's a column separation, you know that, right? It's a given -- it's given information.

Q. Okay. So, you're speaking in terms of maybe a procedure or --

A. Yeah, absolutely. It's procedure.

Q. Oh, okay.

MR. JOHNSON: With that, may I maybe, because it goes right in with it.

BY MR. JOHNSON:

Q. So, that came in at a point and you weren't getting pressures, did you have an MBS alarm or was it just, I guess, the thought process of the location that you said suspected column leak or was there an MBS alarm associated with it?

A. I don't remember if there was an alarm. We don't typically see the alarms as shift leads. So, the operators would see all that information. So, what was said between Tim and myself, like, the phone call that actually came in, Aaron and I

were both sitting there. So, when I said Aaron, actually I think I took the phone call, but it was on speaker phone. So, we both received the phone call.

BY MR. NICHOLSON:

Q. Oh, okay.

A. So, when Tim says I have a suspected column separation, I, or I've got a column sep, I can't get it together then that's when Aaron went and spoke with Tim. So --

Q. Okay.

A. -- I don't know if that --

Q. Yeah, that's good.

A. -- helps --

Q. That is so much --

A. Okay.

Q. Then I'm going to back up just a little bit.

A. Sure.

Q. Were you involved when Tim was starting up the first time at all?

A. No.

Q. Okay. So, you had no involvement in that.

A. No.

Q. Also, on page 10, these are lines 6 and 7. It says, after Aaron had done his calculation and the line was shut down you say you got involved. Is that accurate?

A. That is.

Q. That's when you entered the picture?
A. Yeah.
Q. After Aaron had done the calculation.
A. I guess I entered the picture when I -- when Aaron and I received the phone call --
Q. Okay.
A. -- of column separation, but after the line was shut down is when I got involved with any type of calculations.
Q. So, you were there for the first phone call, but then somehow Darin [sic] takes --
A. Aaron.
Q. I'm sorry. Aaron takes the lead --
A. Yeah.
Q. -- for the first startup.
A. No, well, that was -- so, the first startup happens. Tim starts up the pipeline. After ten minutes he calls the shift lead --
Q. So, no one is involved while Tim is starting up.
A. No.
Q. Okay.
A. No. So, when he doesn't get his pressure at Marshall, that's when he calls the shift leads and gets us involved.
Q. Okay.
A. And at that point when we received the phone call, Aaron goes back and sits with Tim --

Q. Okay.

A. -- for the rest of the process until he -- the line shuts down and after that Aaron comes back to the desks and that's when I kind of get involved.

Q. And why is that? I'm trying to figure out why there's --

A. So --

Q. -- the handoff.

A. So, we've got two consoles.

Q. Right.

A. The shift leads is one. I, as Brian mentioned, I was working with the F&CC, which is --

Q. Right.

A. -- feeder and connecting carrier systems --

Q. Okay.

A. -- which has nothing to do with line 6 --

Q. Right.

A. -- and the main line consoles, and Aaron was responsible for that. So, when Aaron and I are sitting there and he takes a phone, or we take the phone call, he goes back because that's his side and his responsibilities for the night.

Q. Right.

A. So, that's when he got involved. And then I was dealing with issues on my --

Q. Sure.

A. -- my end of things. So, that's why there's that disconnect. Why we don't --

Q. Yes, but eventually you do enter the picture.

A. Right.

Q. Okay.

A. Yeah. So, I enter the picture for support.

Q. Okay.

A. So, to help out where needed and --

Q. That's what I'm trying to get at.

A. Yeah.

Q. So, did Darin [sic] ask you for support, or Tim, or how did --

A. No, Aaron came back and when the line was shut down, we -- no, you just -- they don't ask for support. We don't ask for support. I think it's more of a, you know there's something wrong, let's help out. Right. So --

Q. So, you initiated it. It came as much from you as anyone else.

A. Yeah.

Q. Okay. So, just going back to the, page 10, line 6 and 7, after Aaron had done his calculation and the line was shut down, you said you got involved.

A. Yeah.

Q. And I'm wondering in that statement, the calculations, can you say explicitly which calculations you're referring to in

that sentence?

A. Aaron was calculating the amount of volume that had drained off on the previous shutdown.

Q. Okay.

A. So, the shift before us.

Q. Okay. And can you just talk me a little -- talk to me how you guys would calculate that or what are you looking at?

A. Sure. So, in this case there's a suspected column separation and we look at, okay, well we put so much volume into the pipeline, but we're not filling the column. So, what we do is we look at the previous shutdown, and at the previous shutdown we would calculate how much volume drained off on a line. So, you'd stop your source and by the time your line stops, you've drained off some volume.

Q. Okay.

A. Also, there was another maneuver, I guess upstream of the furthest downstream, another delivery stream.

Q. Upstream of your furthest downstream.

A. So, you got A to B, or we'll say A to C, but at location B half through the line --

Q. You can use the --

A. -- you can deliver there.

Q. You can use the names because --

A. Okay.

Q. I'm sorry. Griffith to --

A. So, we were going Griffith to Sarnia.
Q. Okay.
A. And so we shut down from Stockbridge to Sarnia.
Q. Um-hum.
A. And, so --
Q. That was shut down the previous shift?
A. The previous shift.
Q. Okay.
A. So, we're looking at information from our CMT.
Q. Right.
A. And we're looking at it and saying, okay, at the time of our line shutdown, okay, how much drained off on the -- the line, I think it was shut down from Griffith to Stockbridge.
Q. Okay.
A. But there was a previous shutdown from Griffith to, or Stockbridge to Sarnia.
Q. And that was on the 25th?
A. That was on the, no, I do believe it was the 26th, but the shift before us. So, it was during the afternoon. I, the dates, I know it was before our shift.
Q. Okay.
A. So, I would -- it could have been the 25th. I'm not too sure what time that shutdown was.
Q. But you're in, what, you're in Monday morning, right?
A. No, Sunday night. So --

Q. I'm sorry, you're right, okay, Sunday night.

A. Right. So, the shutdown, the original shutdown from Griffith, or from Stockbridge to Griffith, you know, might have happened Sunday morning.

Q. Okay.

A. And then they kept running the line from --

Q. Okay.

A. -- from Griffith to Stockbridge and then they shut that down in the afternoon on Sunday.

Q. Right. Right.

A. And so what we -- what Aaron would have done is looked at how much drained off between Stockbridge and Griffith on that original shut down, then how much would drain off from Griffith to Stockbridge on that shutdown, and then how much drained off from when we go to startup. So, when Tim goes to startup and he opens up --

Q. Right.

A. -- his valves --

Q. Okay.

A. -- how much volume will be drained off. So, we would calculate the volume.

Q. Okay.

A. So, in the calculations and I think reading my transcripts, I think he calculated like 610 and I calculated --

Q. Yeah, you --

A. --630.
Q. 630.
A. So, it was pretty close.
Q. Right.
A. So, that's the calculations I'm referring to.
Q. Aaron mentioned that after the shutdown they were at a loss of what to do next. Is that sort of when you got involved? That's a, almost, that's paraphrasing from his, actually it was a quote from his transcripts.
A. So -- sorry?
Q. And I'm wondering it's, I mean, that's a statement Aaron makes. He says they were at a loss of what to do next after they shutdown the line. So, is that maybe when he came to you and said, hey, Darin, I don't know what's going on. I need --
A. Yeah, that would be when I get involved.
Q. Okay.
A. Like so we, you know, start kind of throwing ideas off one another --
Q. Did you get --
A. -- and try to --
Q. -- that feeling that maybe Darin [sic] was grasping at --
A. No, I just, I mean, every scenario is different. Nothing is the same. So, okay, well, you know, what's going on here. Let's, you know, talk it out. Figure it out. And, no, I

didn't get the sense that he was, you know, he couldn't explain it, or I guess he couldn't explain it, but I didn't get the sense that I was -- he was worried about it or anything like that.

Q. Was he working with Jim Knudson at the time as well, or --

A. Yeah. Jim was involved through the process.

Q. Okay. So, he was involved prior to Darin [sic} coming back to you.

A. Aaron coming back to me?

Q. Aaron coming back to you.

A. Sorry.

Q. I'm sorry. You guys got --

A. Yeah, they were involved before.

Q. The call to Blaine didn't happen until 3:34 a.m., is what I'm seeing --

A. Yeah.

Q. -- in the transcripts, and I think you confirmed that in your interview. But the line was shut down around 2:00.

A. Um-hum.

Q. I'm trying to figure out what was happening in that hour and a half gap before Blaine was phoned?

A. Is we were going through pressure trends, flow trends, discussions with MBS. That whole time span was used to try to investigate -- trying to explain what --

Q. Okay.

A. -- what the column separation was, the MBS alarm, all that kind of information.

Q. And it was yourself, Aaron, and Jim Knudson that were all --

A. Jim Knudson, yeah.

Q. Okay.

A. And the operators whenever we needed certain information here and there, right.

Q. So, what trends were you looking at? I don't really understand.

A. I pulled up trends from the shutdown so when we shut down --

Q. From your shutdown?

A. Sorry, not -- yeah, from out shutdown. So, basically, from his startup to our shutdown. So, I'm looking at the trends from our shift and you build them and it's, I mean, you can expand on them, the timeframe whatever you need. So, I'm looking at when I recalculate Aaron's numbers, I'm going back to the operator and looking at CMT, any kind of material balance, or, sorry, tracking, all that information.

Q. Okay. That's when you're recalc'ing, that effort.

A. Yeah. And then the trends themselves --

Q. Yeah.

A. -- I'm looking at like pressures at all the stations.

Q. At all the stations, okay.

A. Yeah. And flows, things like that, so --
Q. And nothing was jumping out at you? You --
A. Well, no, because I didn't -- when I'm looking at my trends I'm only looking at from the startup to the shutdown. So --
Q. Right.
A. -- to me that, not familiar with that line, I don't know if it's abnormal or not.
Q. So, I mean you were definitely aware, I mean, I've got trends here --
A. Yeah.
Q. -- on the 26th. So, to me this is what the first startup looks like. And these are all the discharge pressures --
A. Yeah.
Q. -- from the other stations. I've segregated Marshall out here separately.
A. Okay.
Q. So, that's something similar to what you would have looked at?
A. Yeah.
Q. Okay. So, you're aware you had zero pressure here --
A. Yeah.
Q. -- and you gained next to nothing at Marshall.
A. Yeah.
Q. And you were also aware that, you know, as you proceeded

downstream, the discharge pressure off the stations was significantly lower, I mean --

A. They did.

Q. -- they start out pretty good and then Niles can't build much and Mendon is certainly suffering.

A. Right.

Q. Okay.

A. Right.

Q. So, okay. And none of that struck you as abnormal? You didn't know what abnormal was, I guess, is that --

A. Right.

Q. You didn't know that.

A. Exactly.

Q. Did you go to Tim at all at that point and say, you know, is there anything strange about these?

A. I mean we talked about it. He, like I don't recall every going to Tim and saying, you know, does this look abnormal, but asking the question like typically on a shutdown I ask the operators, you know, typically, do you guys -- how much do you drain off on a shutdown? Like are we, you know, close in volume here.

Q. Okay. You did have access to all the MBS displays, too, right?

A. Yeah. We're not trained on it.

Q. Okay.

A. I'm not familiar with it. So, it's -- we have one set of trends that we look at when the MBS alarm goes off and there's a zero line, and if your trend is at zero, meaning I guess that's --

Q. I know some of your screens, which trend, I mean --

A. So --

Q. Is that under the trends button?

A. I don't know. I know how to get there. It's, basically it's just a trend that if you're green line, the MBS line is at zero and straight across, it's good. But if it's bouncing -- if it's below the line for a certain amount of time, you get an either 5 minute, 20 minute, or a 2 hour --

Q. Well, he's talking about your MBS threshold.

A. Right. And that's the only trend that we look at.

Q. That's all you look at.

A. Yeah.

Q. Okay.

A. That's --

Q. So, you didn't look at a liquid fraction, I think you were asked --

A. No.

Q. Okay.

A. No.

Q. Did you know you could go look at that screen?

A. I'm not -- I -- no.

Q. Okay.

A. No. I'm not trained on it nor have we been directed to look at it. So --

Q. And talking about the recalcs you were just mentioning, and you talk about it on my page 10. You said after the line was shut down I went to the operator to --

(Background interruption.)

MR. JOHNSON: Can we take a five minute break?

MR. NICHOLSON: Yeah, well, you know, that's not a bad idea. Maybe we should take a break.

MR. PARSONS: Sure.

MR. NICHOLSON: Off the record.

(Off the record.)

(On the record.)

MR. NICHOLSON: Okay. Part 2 with Darin Parsons. All right. Just to pick up where we might have left off.

BY MR. NICHOLSON:

Q. I think I was going to head to the statement made on page 10, lines 14 through 16. You said, you mentioned, after the line was shut down, I went to the operators and recalculated the number with them, and in that statement I noticed you said operators and you used the plural. I'm just wondering was there more than just Tim Chubb involved or --

A. Yeah, there's Tim Chubb and Ghazal --

Q. Ghazal.

A. -- Derhami
Q. Can you spell that for the record, or --
A. No.
(Laughter.)
MR. PARSONS: Ghazal, G-h-a--z-a-l, and Derhami I think is D-e-r-h-a-m-i.
BY MR. NICHOLSON:
Q. All right. Close enough. Okay. And what was her involvement and what was she?
A. She's the line 14 operator that night, so she operates line 6 as well. Like so she's cross-trained.
Q. Oh, okay. Right.
A. And she was just the other operator as well. So --
Q. Do you rely on her as a technical expert?
A. No.
Q. Okay.
A. No.
Q. So, what was she doing? She was just helping you calc this?
A. Yeah. So, with Tim being involved with the line 6, so I went over and, you know, asked Tim a few questions, but I kind of stayed out of Tim's way and went to Ghazal and said can we go through some of this information?
Q. Oh, so, that was just so Tim could continue operating?
A. Yeah. Yeah, so he can --

Q. Okay.

MR. CHHATRE: Can I ask him before I forget.

BY MR. CHHATRE:

Q. On that particular shift, were any of these operators that you consider kind of experts at all that night?

A. Not that I recall. I can't --

Q. There are other people who you went to where in your mind --

A. No.

Q. -- were more -- okay.

A. No.

MR. CHHATRE: Sorry to interrupt you, Matt.

MR. NICHOLSON: No, that's fine.

BY MR. NICHOLSON:

Q. I'm going to break stride a little bit here, but when Karen was asking you about evaluations and I think she asked you if they were weighted and I thought the answer you had given was they're all weighted the same, the different criteria.

A. The competencies.

Q. Oh, so, I --

A. Yeah.

Q. -- pulled one up because that wasn't how I remembered it. Maybe I'm reading this differently.

A. Um-hum.

Q. So, I'm looking at something called a performance review

manager evaluation. You didn't do this particular one I'm looking at, but is that what you're referring to? Is that what you would fill out for an operator?

A. So, yeah, it's their, yeah, performance management.

Q. Okay.

A. So, and --

Q. But these do look like they're weighted differently.

A. There are different. They're not their core competencies. So, like their core --

Q. Okay.

A. -- competencies would be within the job profile. So, do you have job profile? Do you have objectives in there? And they're weighted differently.

Q. Okay. I might have that. Well, these are -- so, you're saying there's a job profile that's different than a performance review?

A. No, it's part of your performance --

Q. Okay. It's --

A. -- documentation.

Q. And one other thing I noticed on these is, I mean, it looks liked the employers [sic] are filling these out themselves.

A. They fill out themselves and they evaluate themselves as well as we will evaluate them.

Q. Okay.

A. So, throughout the year you should be meeting with your

operators and getting a good idea of where their performance is for the year. So, the numbers that you give them at the end of the year should be very close to what theirs. So, it's another gauge for us to make sure we're on the same page. So, there are going to be discrepancies like, you know, typically they're -- they may evaluate themselves a little higher than I might. So, it's --

MR. JOHNSON: You need to start somewhere.

MR. PARSONS: You got to start somewhere, right.

BY MR. NICHOLSON:

Q. I mean you think that process works pretty well with the writing this thing up and then handing it off to you or --

A. Yeah.

Q. That's better than you trying to write it because you really can't be with them all day --

A. Yeah. We do write it. Like so they'll give us their document with their comments --

Q. Yeah.

A. -- and then we will comment as well on top of that. So, it's just kind of your final review, year end review.

Q. Okay.

A. There's a lot of things that we may not always catch. Like there's -- it'd be something that, you know, you forget because you have 12 people you have to evaluate for a whole year and having to see them throughout the year, you're going to miss

quite a few things. So --

MR. JOHNSON: And for the record, that's the same thing we use across the company. That's the same thing I do and Mr. Curt does also. So --

MR. GOESON: Yeah.

MR. JOHNSON: -- just so you're aware, it's not --

MR. NICHOLSON: Yeah, that's like --

MR. JOHNSON: -- it's not just in the control --

MR. NICHOLSON: -- I'm looking at several layers or levels and they all seem similar. Okay.

MR. JOHNSON: And start high.

BY MR. NICHOLSON:

Q. Can you just tell me, I mean you mentioned real kind of high level explanation on the MBS that's just looking at volume and balance, and I think we understand that part, but what is it using to get flow rates? Is it calculating flow rates? Is it looking at flow meters? How well do you understand that system?

A. I don't know it well enough to comment accurately. I know that, you know, quite often the flow meters that are used on our main line systems are what's used in MBS. So, on our SCADA system if we have five flow transmitters throughout the line, typically, they would use them. I don't know what, you know, they may not use them all. They only may use certain locations. So, I'm not really familiar with MBS in the sense, the technical side of thing. I know --

Q. Do you know if it needs pressures to calculate flows or does it --

A. Yeah.

Q. Okay.

A. It should need pressures to calculate valve operations.

Q. So, if you saw a zero pressure on the line, would you ever go and question how MBS could arrive at an imbalance or, I mean, do you ever think through that?

A. No. Like I never get to that point where I have to, you know, feel that I have to look at it, know MBS inside and out. That's why we have an analyst there.

Q. Okay.

A. So, to get involved, you know, if there's a zero pressure and I know that's abnormal, I'm going to question it, but if I don't know abnormal, if I don't know it's abnormal, then, you know, it's kind of --

Q. Well, I guess what about when they tell you the model is unreliable because of the pressures, do you know what that means? I mean do you understand two phase flow, you know, that you might have vapor in the line?

A. We --

Q. Does that mean it's unreliable?

A. Yeah. When they start talking that kind of lingo, I'm -- I don't understand it. So, it's --

Q. That's for the --

A. Yeah.

Q. That's fine. You mentioned earlier when Ravie was questioning, you said, and I think I heard you correctly, you said you can't rule out a leak as part of a col-sep or MBS alarm. You said you could never rule out a leak.

A. No. Like --

Q. Did I misunderstand?

A. Yeah. I think you might have.

Q. Okay.

A. If you have a leak, you can't rule it out, right?

Q. But, yeah, well, if you have a leak, you couldn't rule that out.

A. Right. And that's what I was referring to.

Q. Okay.

A. So, like to -- when you're doing your checklist and looking over things and --

Q. What checklist would that be?

A. Well, say if you're going over your pressures or --

Q. Okay.

A. -- if, you know, your thought process of trying to investigate the abnormal conditions.

Q. Be specific here, we're -- your troubleshooting your abnormal condition in this case, what a col-sep or --

A. Yeah, in this case it would be a column --

Q. Okay.

A. -- separation. So, if you're looking through your column, or looking and checking your pressures, checking your flows, checking your volumes on your shutdowns and you would be looking at it and, you know, if it's a leak you can't explain it, right? Or I guess you can explain it but you can't discount it like or, how do I phrase this.

Q. I'm wondering --

A. Yeah.

Q. -- I mean you could -- can't you rule out a leak, I mean if you don't have any of the leak triggers maybe --

A. Right. Exactly.

Q. -- you could rule it out, right?

A. Right. Yeah. If you have no leak triggers, right, there's no -- you can say, yeah, it's not a leak.

Q. Right.

A. Right.

Q. Okay.

A. But, I mean, you can have leak, I guess, you know, it's easy to see leak triggers on an absolute, you know --

Q. Right. A steady state.

A. Yeah, a steady state boom, zero pressure, but if you have a leak that's leaking over months and months, you may not see leak triggers and the only one would be your volume and that's over a long period of time.

Q. Sure.

A. So --

Q. And I think you also mentioned that startups and shutdowns are always transient and more likely to produce MBS alarms.

A. Yeah.

Q. Okay. With that being said, though, should, I mean since they're such critical times and it kinds of throws all the systems off, I mean, wouldn't that be a time maybe there should be a special procedure or a buddy system or, you know --

A. During your startups and shutdowns?

Q. Yeah. Wouldn't that be a time to put more eyes on it, or -- maybe there is a shutdown procedure or startup procedure that addresses that.

A. I find that with startups and shutdowns and having your typical MBS alarms associated with the same locations, you know, there's no need to have those extra eyes and eyes on that, on those situations and me, personally, I'm not familiar with those lines. Like when I operated other lines, I knew, okay, I'm going to receive an MBS alarm because, you know, it's not calculating a certain volume. So, I'm familiar with that. As a shift lead, I'm not, with all the lines. So --

Q. Okay.

BY MR. JOHNSON:

Q. I don't want to put words in your mouth. Are you saying that in a way you see the operator having a second set of eyes

because of the software support, the MBS, and the other things that, you know, so he or she is starting up the line alone but has these other softwares that alert he or she to items so it's not like he's there necessarily alone. Did I --

A. No.

Q. -- misunderstand that?

A. I interpret it as having another person there watching the startup and shutdowns and seeing the same alarms over. That's, when I answered your question, that's what I meant for --

Q. Okay.

A. Having someone there sitting there watching. Not so much the --

Q. So, you don't see the need for that?

A. No, not on MBS alarms that happen every time on a startup or shutdown. They just seem very common.

BY MR. NICHOLSON:

Q. Well, and that's my point, I guess. You almost have throw MBS -- from what I'm hearing, MBS doesn't work on startup and shutdowns. You got to just basically disregard it and be looking at other leak triggers, maybe in combination with it, but --

A. Right.

Q. -- you certainly can't rule out MBS alone. At least it failed you in this sense.

A. It failed us on this sense on the shutdown.

Q. Well, and the startup --

A. Yeah. Yeah. The -- I don't think more eyes are going to help.

Q. Okay.

A. I don't think more eyes. I think more accurate information or a better system. I mean why do we have redundant MBS alarms on a startup and shutdown every time. Obviously, there has to be something there, but why do we get them every time. Why are we receiving the same alarm and if you startup and shutdown a small little line that feeds one of your terminals and you get an MBS alarm every time you do it and you do it five times a day and five times a shift and so you get it 10 times a day it becomes redundant, and you're just kind of, oh, that's normal.

Q. Yeah.

A. Right?

Q. Right. Yeah.

A. So, I think having a more accurate system or a system that's a little more -- have more detail and more explanation would be beneficial there.

Q. Okay.

A. I don't think another set of eyes is going to change --

Q. Right.

A. -- the fact that they see the same alarm ten times.

Q. Okay. That's fair. Good. I'm going to build on that then. That wasn't where I was going next, but then, you know,

when we talk about things that could have been done better I think that's really what you just answered is maybe, you know, a more robust system or something more capable of detecting accurately. But you also mentioned earlier I think you wanted more detailed procedures and so I'm asking, I guess, did the procedures kind of fail in this event or were the procedures okay and they weren't followed, or --

A. No, I think the procedures are okay. I just feel that having more detail in them is beneficial. It's, in a situation like this there can be several different procedures that are involved like you could have a suspected column separation procedure. You could have the column separation procedure. You could have the MBS leak procedure. You've got suspected leak procedure.

Q. Right.

A. There's a number of procedures so where do you start? And in our procedure database, you know, there are links, you know. If it's here it's there, but to narrow it down and go with one, it's tough to --

Q. Yeah, I noticed that, too.

A. Right.

Q. It seems like they're very modular and you start here and go here, there.

A. Yeah. But in this situation with Marshall, I mean, you could probably pull up six different procedures to start with --

Q. Yeah.

A. -- in order to, you know, go through. But I think if it was more detailed, more refined would be certainly a lot better.

Q. Okay.

A. But --

Q. Or maybe included other tools with it.

A. Absolutely, yes.

Q. You mentioned also earlier that the calculations you were doing for the drain-up is something that an operator is trained to do, or --

A. Yeah.

Q. Okay. So, why didn't Tim Chubb do those calcs?

A. I don't know.

Q. Okay.

A. He might have. I don't know if he did or not, but, I mean, just to make sure the, I get the volumes and the numbers that I did, that I want to see, that's why I do them. So --

Q. Okay. Going back to transcripts here. On page 13, lines 13 through 17, there's a, it states there, it says, yeah, at that point we felt that looking at our pressures coming into the line, we potentially didn't have enough horsepower or energy, I guess, to overcome the column sep because of drain-up we experienced on startup. And I'm just wondering did both you and Aaron come up with that same conclusion? Was it -- or are you paraphrasing Aaron's --

A. Aaron's.

Q. I'm sorry, Aaron's --

A. That's all right.

Q. I'm going to do that throughout today and tomorrow. Yeah, were you just paraphrasing something that Aaron had said, or --

A. A lot of that conversation pertained or involved Aaron and Jim Knudson.

Q. Okay.

A. So, that information, and Jim at the -- he would have been one of those, even though he's an MBS analyst, he operated the pipeline systems for several years prior, too, so I would have considered him a technical expert on the line even though he was an MBS analyst. So, a lot of the information I received from him, you know, I felt is -- was accurate. And so when he gets involved with horsepower, and at that point I'm kind of in and out of the conversation between Aaron and Jim throughout that part of the investigation. So, that comment where I say we felt looking at the pressures coming into the line were potentially, that we potentially didn't have enough horsepower, a lot of that information is me, I guess communicating that to Blaine, well, actually, I talk with Blaine later one in the --

Q. Yeah, right.

A. -- on the phone.

Q. Yeah.

A. So, I'm more of the guy picking up the phone and doing some of the admin stuff for Aaron while the investigation process is going on.

Q. Okay. So, it's really Aaron and --

A. Aaron and Jim --

Q. -- Jim --

A. -- and I'm kind of in and out throughout the conversation.

Q. Okay.

A. Right. So, like I'm not full on with it so I'm helping out where I can.

Q. And you said Jim is the technical expert.

A. He's an MBS analyst, but, you know, based on his experience of operating pipelines, I would consider him technically strong.

Q. In hydraulics.

A. Yes.

Q. An expert.

A. Yeah.

Q. You answered that next question then. So, then, going back to Jim Knudson and his involvement, when did he first start getting involved? When was he working with Aaron then?

A. I'm not -- I don't know if he -- I can assume he got involved when we didn't get -- when we didn't have our -- get our column together when, on the initial startup. I can assume that's

when he got involved, but to be precise, I can't answer that.

Q. I think this was already addressed, Darin, I apologize, but I'm going to ask you again.

A. No.

Q. Did you research the column separations and alarms that Tim Chubb reported to you?

A. Did we -- did I research the column separation and alarms? No, I did not.

Q. Well, technically they'd be MBS alarms, right?

A. Right.

Q. Okay.

A. Right.

Q. So, in these interviews we're hearing a lot about this ten minute rule and I wanted to hear from you what the ten minute rule means or -- maybe start with, you know, what it means to you.

A. Sure. So, my understanding of the ten minute rule is if you can't get a column separation or you can't get pressure from station A to station B within ten minutes, you shut down.

Q. Okay. And that's how the procedure is written.

A. I believe so.

Q. Okay.

A. Yeah.

Q. So, then we know then on that first startup that you extended beyond the ten minute rule.

A. Right.

Q. That's in the transcripts. But then I'm looking through the procedures, I don't see anything that says you are permitted to do that. So, is that just something you guys understand in the control room, or --

A. That's something I would follow, like I would follow the shutdown.

Q. Or am I wrong? Maybe there is a procedure, I should restate that --

A. No.

Q. -- that I don't know of.

A. No. There was a pending procedure, one that was pending on calculating your volume so when we look at the volumes that have been calculated it's --

Q. That's that col-sep worksheet --

A. Yeah.

Q. -- that I've seen?

A. I do believe so. It's where you calculate the volume that --

Q. Yeah.

A. -- you've, like, so, you may not have ten minutes to get your column back together because you've drained off too much product or too much oil.

Q. Uh-huh.

A. So, you need to extend past the ten minute rule.

Q. Okay. And so that worksheet was already pending.

A. Pending approval. It wasn't approved.
Q. Oh, okay. When was it introduced?
A. I don't know.
Q. Where does it sit when it's pending? I mean how do you get to it?
A. I don't know. That's -- I wasn't aware of it--
Q. You didn't pull it up.
A. No, I didn't pull it up.
Q. Oh, okay.
A. No, I wasn't aware of it. So --
Q. Well, who pulled it up then? Who was aware of it?
A. I believe Ghazal Derhami pulled that up.
Q. Okay. The other operator.
A. Yeah. Yeah.
Q. Okay.
BY MS. BUTLER:
Q. I'm sorry, could you repeat. There was a pending procedure pulled up, is that was what you're talking about.
A. Yes, Karen.
Q. Do you know the name of that? I'm sorry.
A. No, I don't.
MR. NICHOLSON: I believe what he's referring to is the col-sep worksheet, maybe I should pull it out, that we went over the other day.
Curt, can you shed some light for us on it?

MR. GOESON: No, I don't believe Darin is referring to that.

MR. NICHOLSON: Oh, okay.

MR. GOESON: That was put into place for the 6B startup.

MR. NICHOLSON: Oh.

MR. GOESON: Restart.

MR. NICHOLSON: Oh.

MR. GOESON: I think he's just referring to a proposed --

MR. PARSONS: Yeah.

MR. GOESON: -- revision to --

MR. PARSONS: Yeah.

MR. GOESON: -- to the procedure.

MR. NICHOLSON: To the --

MR. GOESON: And not the --

MR. NICHOLSON: -- MBS alarm --

MR. PARSONS: No --

MR. NICHOLSON: -- procedure.

MR. PARSONS: -- to the ten minute rule. I never saw it.

MR. NICHOLSON: Okay.

MR. PARSONS: But, I never saw the procedure, but --

MR. NICHOLSON: Let me make that an IR request, please, Jay.

MR. JOHNSON: You did.

MR. NICHOLSON: Did we already? Okay.

MR. JOHNSON: Um-hum.

MR. NICHOLSON: If we hadn't.

MR. JOHNSON: Okay.

BY MR. NICHOLSON:

Q. And that's confusing to me in I've gone through some of these procedures, but not all, but I don't see an actual procedure that was called out ten minute rule, right?

A. Right. No, the ten --

Q. It's --

A. -- minute rule is within procedure.

Q. All right.

A. So, it's within the column suspected/column separation procedure. You know if you don't have your column put together within ten minutes and we call it just the ten minute rule. If you can't account for your volume, or sorry, pressure, from station A to station B within ten minutes, you shut down.

Q. Okay. So, that's is a --

A. So, there's no --

Q. -- suspected col-sep procedure?

A. Well, I don't know what procedure that --

Q. Okay.

A. Because there's so many procedures.

Q. Yeah.

A. I, you know, I can go find it for you, but I don't know

exactly what procedure that it could fall in.

Q. I couldn't find that procedure because I don't have anything like that. I've got MBS alarm procedures and --

A. Right. So --

Q. Talk to --

A. -- do you have suspected column separation procedure?

Q. I don't have anything called suspected column separation.

A. Okay.

Q. It's been very frustrating. So, if we could --

A. So --

Q. -- somehow locate that.

A. So, that's the procedure that -

Q. Okay.

A. I guess not the ten minute rule procedure, but we just call it the ten minute rule.

Q. Okay.

A. And it's within the procedure if you can't get pressure from A to B in ten minutes you shut down.

Q. Okay. And I want to be sure I understand that it specifically says it's station to station. So, even though you start your line up at --

A. Um-hum.

Q. -- whatever time, say 1:00 --

A. Right.

Q. -- and it takes you --
A. Twenty minutes to get, yeah --
Q. To get to station Z --
A. Yeah.
Q. -- or whatever, your ten minute rule really doesn't start until you hit that station.
A. It's the immediate station upstream.
Q. Okay.
A. So, you could be running your line for, you know, 15, 20 minutes before you get to station A and then station B doesn't see pressure after you have differential at that station, then you shut down.
Q. Okay. And you interpret it pretty much as all shift leads interpret it, or is it black and white the procedure that that's how it is.
A. That's how I interpret it.
Q. Okay.
A. Like I mean, yeah, the procedure is what you go by, right, and if, you know if the procedure says shut down after ten minutes you should be shutting down, the operator should be shutting down the line.
Q. But I guess what I'm asking, and then the procedure will say at station X or --
A. No.
Q. Oh, okay.

A. No, it just -- it's just when the immediate upstream station has differential pressure.
Q. Uh-huh.
A. And if you cannot get pressure at the next downstream station --
Q. Okay.
A. -- shut down.
Q. So, this is -- okay. I'm going to get into this a little more because now when does Tim Chubb calls you? He calls --
A. He calls at --
Q. Ten minutes.
A. -- ten minutes.
Q. After starting the line.
A. No.
Q. Okay.
A. Ten minutes after he sees -- he doesn't get his pressure --
Q. At Mendon.
A. At Mendon, that's right.
Q. After starting Mendon.
A. Right. Or, Marshall.
Q. Yeah.
A. He starts Mendon, it's Marshall. So, he doesn't --
Q. Right.

A. Yeah.

Q. After not seeing it at Marshall for ten minutes, he calls you.

A. Right.

Q. Okay. So, he's consistent with that rule. When you called Blaine, because that was you that called Blaine, right?

A. Yeah.

Q. Okay. Did you express to him that you had extended the ten minute rule or that you had exceeded the ten minute --

A. I don't recall. I don't remember the conversation we had. It's been a while, so --

Q. Okay.

A. Phone records.

Q. So, we don't know if Blaine actually knew or does he even need to know that the line is run?

A. No, he should know. Like --

Q. Okay.

A. -- I would suspect I told him that we went past.

Q. Ten minutes.

A. Yeah.

Q. Okay. And then I guess I want to spend a little time on that conversation. In the conversation with Blaine, you bring up the topic of not enough pump power to bring the column separation back, or a leak?

A. Yeah.

Q. And actually, I mean, I've got the record of the call so I read through it.

A. Yeah.

Q. And you actually, at some point you questioned, I think you're on the call and Jim is on the call and Blaine is on the call, right? It's just the three of you.

A. Um-hum.

Q. And I think you actually kind of push back a little bit and say, well, I put in, I think it was 1600 cubes. We got so much out. Where's it all going. So, it looked like for a brief moment you guys were going down the track of a leak, but things got reversed in that conversation. All of a sudden you're back to talking pump power and I'm just wondering, you know, how did everything get sidetracked, or how does --

A. Yeah.

Q. What were the forces at play here that moved everyone in the direction of pump power?

A. I think in that information there, the movement from, away from that was directly involved with Jim Knudson and his technical expertise --

Q. Okay.

A. -- on that. So, that's where that conversation gets redirected --

Q. Okay.

A. -- back to horsepower.

Q. So, you don't have enough of a background you don't --
A. Right.
Q. -- think to have countered anything --
A. Absolutely.
Q. -- that Jim was saying.
A. Right.
Q. Okay.
A. Right.
Q. And I think Karen asked this before, so forgive me, but then the MBS' analyst role, I mean, where does he fit in the whole hierarchy. So, his say is final say because he is an analyst, is that how that works or is your say the final say?
A. In regards to whether to --
Q. Whether to restart or --
A. Restart.
Q. -- extend.
A. Well, I think in the end your final say comes from the highest person involved. So, in this case it would be Blaine.
Q. Okay.
A. But Blaine is only as good as the information he gets from myself and the analyst. So, what information we provide him gives approval to startup. Blaine says don't start up again, we don't start up --
Q. Sure.
A. -- because we don't have approval to do that. But, he's

only as good as the information we give him. So, if Jim Knudson is telling us that we don't have enough horsepower, you know, to overcome that column, then that's the information we have.

Q. Was, and, let me see how I can phrase this. I mean that was at the time, I know things might have changed, but at the time that was fairly typical to have that kind of input from Jim, or was he --

A. Well, each analyst is --

Q. -- out of balance?

A. Each analyst is a little different and Tim has got, or Jim, sorry, Jim has got a lot of experience operating --

Q. Uh-huh.

A. -- so, he likes to take it a little further --

Q. Oh, okay.

A. -- from a sense like so he's not just an analyst and says, yeah, the model is working or not. There's a lot more input there from Jim.

Q. Okay.

A. So --

Q. Have you worked with Shane then as well, or --

A. Yeah, I have. I've worked with him briefly from time to time on shifts. So --

Q. I haven't interviewed Shane --

A. Yeah.

Q. -- so, I don't know. So, how is Shane then? What kind

of information does he offer?

A. Shane would -- Shane being a new person not with Enbridge would probably say you can explain it or not. Is it working or not?

Q. Okay.

A. That would be the extent of it.

Q. Okay.

A. So, if there was any further discussions -- there would not be further discussions about pump power or, you know, you don't have enough there, you can't overcome it. So --

Q. Okay.

A. -- the other analysts that are involved, good chance we don't start up the second time.

Q. Did you -- you didn't ask Jim to look into pump power or anything though.

A. No.

Q. Okay. He just took it upon himself.

A. And a lot of these conversations with Jim are really happening between Aaron and Jim.

Q. Okay.

A. So, not so much me. So, my involvement within the actual investigation portion is assisting Aaron. So, I'm making the phone call for him to Blaine or looking at trends for him, calculating volumes. So, a lot of the conversation is between Aaron and Jim.

Q. Yeah. That bothered me, too, a little bit because, I mean, if Aaron is doing all the work with Jim, why are you making the call to Blaine? I mean does he even have the background?

A. Did -- sorry.

Q. The background for all the discussions that are taking place.

A. And I don't -- and that's the thing, a lot of the information I have is getting it from Aaron as who's sitting next to me within the phone call.

Q. And why didn't Aaron call Blaine?

A. I don't know. I don't know.

Q. He asked you to do it?

A. No. I said I'm just going to call Blaine.

Q. Oh, okay. You just --

A. Yeah, so, I, yeah.

Q. So, after that hour and a half or so --

A. Yeah.

Q. -- investigating you thought that --

A. Okay. Enough --

Q. (indiscernible)

A. Enough, enough, yeah. Let's just get Blaine involved now, right.

BY MR. JOHNSON:

Q. Did you do it on a speaker phone with Aaron there, or did you --

A. Yeah, Aaron was, yeah, because Jim got involved with that conversation and we were on speaker phone.

Q. Okay. So, you made the call but from an information sharing standpoint, Aaron and/or Jim were on --

A. Yeah.

Q. -- the speaker call.

A. I don't believe -- I think Aaron was sitting next to us listening, but he was on his computer doing his work, whether it's --

BY MR. NICHOLSON:

Q. Oh, okay.

A. -- paperwork --

Q. So, he was aware of the whole conversation.

A. Yeah.

Q. He could have chimed in at any time.

A. Yeah.

Q. Okay. Now, Jim says he was only there for a portion of that conversation.

A. Yeah. So, when I needed to get him involved with the explanation of the horsepower, that's when I got Jim involved. So --

Q. Okay. And ultimately in that conversation you bring up the procedure, I think, and you're reading through the MBS procedure and that MBS procedure at some point is, you have to look to the MBS analyzer to make the call, whether it's a valid

alarm or false alarm thing, right?

A. Yeah, I don't recall.

Q. You don't recall?

A. No. I haven't heard the --

Q. They haven't shared that with you.

A. No.

Q. You say after the call with Blaine we continued to investigate. And I'm just curious, I want to define who we is.

A. Aaron and Jim and I.

Q. All three of you.

A. Yeah.

Q. Now, was there any further information from the previous shift that would have helped you in troubleshooting these issues? If they told you they had an MBS alarm or low suction pressure or --

A. Well, certainly knowing like not familiar with Marshall and the line 6, like someone coming to me and saying zero pressure is not right here would be beneficial.

Q. Okay.

A. But I mean prior to the startup and that I didn't know it wasn't --

Q. Right.

A. -- abnormal. So --

Q. I know it didn't happen, but had it happened, you think it would have changed the outcome a little?

A. I think having that information, right, and that comes from the operators involved, right, because they're the ones that are looking at a line. So, a shift lead saying to me, oh, I noticed zero pressure on this is going to be pretty rare looking at every --

Q. Yeah.

A. -- pipeline and every terminal saying it's not -- that doesn't look right.

Q. So, you rely on the operator --

A. Yeah.

Q. -- a little to --

A. Yeah.

Q. -- have captured it. You think all the right questions were asked on the 26th, and that could be did Blaine ask you all the right questions whereas for Blaine to make a sound decision? Did you ask all the right questions --

A. Well, I --

Q. -- in your --

A. I think looking back on it, no, because there's always more questions you can ask in order to get more information to make those types of decision. I think, you know, if I had --

Q. So, play it out.

A. So, if I --

Q. What could you have asked?

A. If I would have, you know, if I would have said is zero

pressure normal here and/or if, yeah, like what happened on the initial shutdown? What did our pressures look like? That kind of -- those kinds of questions. I mean there's always more you can look back and say I would have -- wish I would have done, you know, would have asked those type of questions.

Q. And that's what we're doing.

A. I think, yeah, you know, why didn't I ask like is this a leak, right? Like and I don't know if I ever did say that, you know. You're thinking that.

Q. Yeah, you were hinting at it.

A. Right.

Q. There are several conversations --

A. Exactly. So, throughout it, you know, you're -- but why didn't, you know, maybe if I would have said that maybe Blaine says, yeah, don't startup again.

Q. Would it -- if you had a procedure that said assume any column separation is a leak, telling you that --

A. Yeah, absolutely.

Q. -- eliminate all leak triggers, maybe that --

A. Yeah.

Q. If you start with worst case and after that, would that have been beneficial?

A. It could, yeah, it could have been, right. In hindsight, you know, any of that stuff, you know, I know -- what if I'd called the pipeline company in the area, you know. Have

you got any phone calls, right? But you can question all that stuff and say --

Q. Well, that's a good thought. I mean did you even have that information available to call those people?

A. Probably not.

Q. Okay.

A. Right, but like what if.

Q. Sure.

A. You know what if you asked those type of questions. Like have you heard anything? What's going on? Right.

BY MR. JOHNSON:

Q. One of the questions that Karen has asked is the screens go from green to blue on low pressure, but, for the operator, but they don't alarm. So, when you're looking historically, I don't know that you see that and so Karen said if there was an alarm when the pressure got below a certain point so you would check your alarm history --

MR. JOHNSON: And, Karen, jump in here because I know this is your question more than mine.

BY MR. JOHNSON:

Q. Would that have helped because you would have seen that maybe in an alarm panel? Is that something you look at or is that what the operator looks at?

A. That's what the operator looks at.

Q. Okay.

A. So, yeah, the lines themselves, we don't typically look at the lines, look at the pressures, look at any of that information. So, we get involved when the operator calls us. So, when their procedure says get the shift lead involved at this point, that's when we get involved. So, from a standpoint of looking at lines or looking at a pressure to see if it's abnormal, we wouldn't do that.

Q. Okay.

MS. BUTLER: Okay. So, I'm going to phrase that a little bit differently, if that's all right --

MR. PARSONS: Sure.

MS. BUTLER: -- with everybody in the room.

MR. NICHOLSON: Yeah, go ahead, Karen.

MS. BUTLER: Okay.

BY MS. BUTLER:

Q. Since you, as shift leads are there to do a variety of things, right, and it's clear on an event like this that you're trying to help out, but yet you don't have the specific understanding of each system to identify certain things like such as an abnormal low pressure, conceivably, I would say probably that relates to an abnormal high pressure, as a result of that, if there was something that was set in the control room for highs and lows that never moved, those are pressures that are actually set in such a way that those particular types of things don't move unless say there's been a major change to the line such as you got

new pipes so you have a higher discharge pressure allowed, and those are always there to be there as the limits by which, hey, below this it is never like this or it shouldn't be like this. When you as a shift lead pull up things, if you saw that and the alarm descriptor was set in a way that everybody understood that meant you hit an abnormal level, could you have determined more?

A. I don't -- we probably could have determined more because being aware that that pressure was abnormal or low. So --

Q. And I --

A. I guess we could have determined more because we, you know, perhaps broadened our trends and gone back to look at it. So, if we know that this pressure went to -- went below normal or below the allowable alarm limit that is previously set, if it goes below that, we can go back to the time stamp, find out what happened, go back, trend this situation that occurred and determine why that pressure went low.

Q. Okay. And the reason I want to clarify that is because what I've heard people say from a shift lead perspective is that it was an abnormal pressure or it wasn't a normal pressure, or it went to zero pressure and it typically doesn't do that. And so what that tells me is that there is a limit on some lines where something below the norm would trigger events for a lot of people to think differently. And clearly more than one shift lead has indicated the words abnormal, not normal, you know, and that type of reflection. Zero pressure wasn't typical or wasn't normal,

that type of reflection. So, that's why it came up. Okay?

A. Okay.

Q. And I'll go back to Matt questioning.

MS. BUTLER: Sorry, Matt.

MR. NICHOLSON: That's all right. I really only had one other one. I think we covered most of this.

BY MR. NICHOLSON:

Q. And that is, and it's along the same lines. Do you think all available data -- I've worded this wrong. I want to rephrase that. Do you think you had all the available data you needed? Was there enough data available to maybe have caught this if you'd looked deeper and know where to look?

A. Yeah, I think all of the data is there. It's just going back far enough to see it. So, when we're looking at trends and not knowing there was anything abnormal --

Q. Well, even, forget about the shutdown.

A. Yeah.

Q. Because that's I think what you're referring to.

A. Right.

Q. So, had you gone back and seen the big pressure drop.

A. Right.

Q. But even just in your small window there, did you have enough information to have ruled out line pack or did you --

A. Yeah, I think we should have had enough information. Whether we were, I guess directed in the wrong direction from

that.

Q. That's essentially what I'm asking.

A. Yeah.

Q. I mean was the information there and maybe people weren't utilizing that information correctly or just didn't know where it was or how to interpret it or are you actually missing --

A. Yeah.

Q. -- SCADA data that you should have had?

A. No, I think the SCADA data is there. It's there and the information is there. Obviously, when you look at volume that you put into the line and the volume that's not coming out, I mean, you mentioned I questioned it, and I, you know, couldn't explain it but yet it's explainable to someone that's saying that there's -- you don't have enough horsepower. So, taking that information and relying on someone that has a lot more experience in that role, you're relying on that information.

So, I guess, I mean you have to trust those that are involved to some extent and go with the decisions that, you know, that are made.

Q. Okay. So, you do think you probably had enough information at your fingertips and --

A. Yeah, I mean look at --

Q. -- and you knew what it meant or where to go.

A. Yeah, I mean it's one of those tough ones where you start up the line you see your pressure getting to Marshall and it

gets to four pounds and then settles out but yet a number of variables, you know, that are potentially, I guess giving you the impression that you don't have enough horsepower.

Q. There's been a lot of talk about, in previous interviews, not yours, about network traffic and restarting machines and stuff. I'm just curious. I don't think -- were any of those issues network where you're getting lag or --

A. Not that I'm aware of, no.

Q. Okay. So --

A. There was no problems there.

Q. -- none of those were compounding --

A. No.

Q. -- or problematic. Okay. And then I'll just kind of close with the, going back to sort of the analysis that ended up being not enough pump horsepower. I'm just curious. If you don't know this, that's fine. But I don't -- in my mind if a station is going to be out someone in engineering has probably already looked at the hydraulic model to say this station is going to be out on startup. We're going to be running (indiscernible) to Mendon. It's a longer section than we normally run. We should be okay. Our flow rates are not -- is there any kind of analysis -- did you actually have to go down the road, or Jim, I don't want to put you on the spot, did that analysis even need to happen where they're looking at pump horsepower? Shouldn't that have already been -- it's either factored into your system already that you could have

a station out or someone has done those numbers before startup.

A. Yeah, it's -- there should be something there that tells you that, you know, like knowing, I guess, from a capacity restriction. So, if you have a station that's out or being bypassed you know what type of capacity that's going to impact. It's going to, you know, you can only maintain a certain rate or you can --

Q. Yeah, okay.

A. -- you know, your max rate without that station is going to be this. You, I guess you would know that information. They wouldn't put a station out that's out of service if you couldn't run your line above minimum flow rate.

Q. Okay.

A. Right. So --

Q. That's what I'm asking.

A. Yeah.

Q. You say they though. That's, CCO engineering?

A. Yeah, that would be engineering. Right.

Q. Okay. And is that communicated to you?

A. Not, no.

Q. Just --

A. No, like it, yeah, they go about, you know, putting the type of capacity restrictions through. If there's a field work request to say we need this station out due to pump removal or something like that, well then they either, you know, have to

allow it and if it doesn't impact your mainline from a minimum flow rate.

Q. Okay.

A. Detectable minimum flow rate.

Q. Okay.

A. Or else have to, you know, come up with some other means of being able to get that field work request approved.

Q. So, really, looking back, I mean, you shouldn't have to question pump power from a station because someone has already looked at that, right? Or am I wrong? Are there times when you have to do that?

A. And that's why, like I don't understand why it can't, you know, I don't have a lot of experience, but I'm like, well, why, we should have enough horsepower to overcome it. But I'm being told that, you don't.

Q. Okay.

A. So --

Q. Okay.

MR. JOHNSON: Going on that, you know, and listening yesterday and today, my understanding was or impression was there was enough horsepower, it just -- more had to be brought on at Mendon because Niles being bypassed. So, there was enough horsepower there, but they weren't up to the horsepower or they were up to the discharge pressures at Mendon?

MR. NICHOLSON: Yeah, there is some discussion about,

well --

MR. PARSONS: Yeah.

MR. NICHOLSON: -- Darin --

MR. PARSONS: And that's --

MR. NICHOLSON: -- can talk to this.

MR. PARSONS: Yeah, precisely that. It's, you know, not having enough horsepower to overcome what's drained off. So, you can't, like you have to, I think in the initial startup when they open up their line they just drained off the line and it didn't keep it in there. So, it gives you -- it takes that much more power to, you know, push it in, or bring the column back together. And if, you know, you had a valve close downstream of that station you'd get the column back a lot quicker. So, if it's just -- if you're just filling in the column slowly, you don't have enough horsepower just to, you know, put it together.

BY MR. NICHOLSON:

Q. It just takes you longer right?

A. Right. It just takes you longer, exactly.

Q. Okay.

A. And that's what we were thinking happened is that, oh, it's taking longer than, to get, because of LaPort's pump availability bypassing Niles and --

UNIDENTIFIED MALE: Yeah, you're just running (indiscernible) --

MR. PARSONS: Exactly.

UNIDENTIFIED MALE: Right.

MR. PARSONS: Exactly.

MR. NICHOLSON: Okay, I'm finished with that. Karen, do you have anything else?

MS. BUTLER: I do. Quite a few little things to clean-up. So, do we need a five minute break? I'm just asking?

MR. PARSONS: I'm good.

MR. NICHOLSON: Darin is good.

UNIDENTIFIED MALE: We're good.

MR. NICHOLSON: I think we're all good. Go ahead.

MS. BUTLER: Okay. All right.

BY MS. BUTLER:

Q. So, we talked previously about sometimes there's other operators in the room that you had asked for technical assistance and they might be there to help out and I think that question was asked by Ravie and we kind of responded that we didn't ask anybody else in the room. Is it -- do you remember was it because they were too busy on other issues?

A. No, I think we didn't consult other operators because we got too involved with the investigation process. So, at that point, you know, you just, you get so involved you forget to, you know, to look around to see who's around you.

Q. That's fine. Okay. Then, you know, I believe one of the other comments was shouldn't Tim Chubb have performed the calculations for drain-out, and we chatted about that previously I

think in this discussion. Isn't it possible that he could have asked his shift mate to help out with that?

A. Yeah, he could have.

Q. Okay. Do you know whether he did or not?

A. No.

Q. Okay. If you assume a leak, what do you do then?

A. If we assume a leak we follow procedure to isolate, sectionalize, notify our on-call staff, regional management.

Q. And --

UNIDENTIFIED MALE: Do you want to clarify, if you suspect a leak or assume a leak?

MS. BUTLER: My question was assume.

UNIDENTIFIED MALE: Okay.

MS. BUTLER: But he may wish to clarify his answer.

MR. PARSONS: No, mine was for assume. So, if there's a leak, we assume that there's a leak, we follow procedure.

BY MR. JOHNSON:

Q. Would you see a different, in the terminology assume or suspect? Would you -- if you suspect --

A. Yeah, if we --

Q. I'm thinking that's the same thing for you?

A. Well, if we, yeah, there's different procedures, right. So, if I go, yeah, there's suspected leak and then there's confirmed leak and I would go confirm leak when I assume, and I'd follow that procedure. Suspected leak, I'd follow the suspected

leak procedure.

BY MS. BUTLER:

Q. Okay. So, let's say that we're assuming there's a leak and you followed procedure to isolate, sectionalize, and notify. What's that procedure called?

A. Confirm leak --

Q. Okay.

A. -- procedure, I do believe.

Q. Okay. All right. And when you get into that process, is that an overwhelming task or is it pretty easy to declare and just get moving on it?

A. Yeah, once you, yeah, it's pretty easy. Just, you know, follow the procedure and start making your notification calls and, yeah, it's pretty clear.

Q. And is that procedure in your mind detailed enough?

A. Yes.

Q. Okay. All right. And do you have training on that procedure?

A. Not training, but we've, you know, every one has a limited experience with it right, with say the numbers of leaks we've done. We've all probably had to follow that procedure once or twice throughout our --

Q. Okay.

A. -- our time.

Q. And you mean like the shift leads have all --

A. Yes. Yeah.
Q. Would you say that about the operators or would that experience be different for the operators?
A. No, the experience would probably be a lot more, they would be involved a lot more with that procedure.
Q. All right.
A. In the sense that they, they're operating the line. So, if they see three leak triggers they're following that procedure right away and then we get involved and, you know, there's a certain portion of that procedure where we take over.
Q. So, after you confirm a leak, we used this procedure, we've sectionalized and we're beginning our notifications, at what point do we shift into an emergency procedure or is confirmed leak part of your emergency procedure?
A. That's the emergency procedure. And then from that procedure we have like the confirm leak notification procedure where we would follow after we --
Q. Okay.
A. -- you know.
Q. And so do you have like yearly review of that?
A. Yes, we do.
Q. And when you have a yearly review of that procedure, do you like cover that with the operators as shift leads, or do you have the yearly review from supervisory to you, or do you all review it together? How does that work?

A. It's more of a, I guess a collaborative review. So, the operators would review it as well as the shift leads.

Q. Do you do that together?

A. No.

Q. So, when changes come into the emergency procedures, how do you address that with the staff?

A. There's usually an email that's sent out to the group.

Q. Is that something that you as a shift lead would cover in detail with the operators?

A. Not typically because usually changes are very minor, but if it's something that, in, say if it was a serious procedure or something that was a big change, we would definitely review it with the operators directly.

Q. Okay. Regarding the LPM system, I'm shifting gears on you. So, just clear your mind of the previous procedure discussion. On the LPM system and how it functions on the SCADA in general, do you know if it's meant to protect overpressure only?

A. The LPM system? Sorry, Karen, I just want to make sure. Does the -- are you asking does it only look at overpressure not low suction?

Q. Right.

A. In my belief, that's -- the overpressure is more the severity of, I guess, being -- you want to be informed of the high pressure versus the low pressure and the low pressure being MBS as

your support there.

Q. Okay. Thank you for that. Do you understand the LPM system thoroughly?

A. No.

Q. Has there been time spent giving you training on that?

A. Like we -- I know, like, I guess when you say thoroughly, do I know it like the back of my hand? No, I don't, but I mean we do have some training as operators when we are trained there with the LPM system. We've got an idea of when pressure limits are imposed and what it does, how it affects the line, how we operate our line. Yeah, I'm familiar with it. But not really following it as an operator day to day, you lose touch.

Q. Okay. All right. So, do you -- when you input changes to the pressure allowable limit, how do you communicate that to the staff?

A. Depending on what it affects, Karen, I would send an email to the group that it affects. So, if it's -- if your discharge pressure, your maximum allowed discharge pressure decreases by a significant amount, you know, it'd certainly warrant a, you know, a high urgent or a, you know, high priority email where they're informed of the potential impact it has now to their mainline.

Q. Is there a standard process or procedure that addresses how you communicate that with the staff?

A. No, I don't believe so.

Q. So, you would mark an email urgent or something if it was a significant change?

A. Yeah. If I know that's going to impact the mainline, I would send it out.

Q. Since you have the opportunity to see multiple systems or hear complaints on behalf of the operators, I would assume, as a shift lead, do you notice pressure control valve problems, or PCV control problems?

A. Yeah. They're, I mean, we've got them all over our system and, yeah, there are a lot that are problematic and don't work as they should, whether that's being react quick enough or react too quick or maybe not even there and should be.

Q. Have you made requests for enhancements or things like that that, say, could put a pressure control valve at a location where it isn't?

A. I haven't as a shift lead, but direction to do that would be through the operators to put in a FacMan.

Q. Okay. So, it would go through the FacMan process?

A. Typically, yes.

Q. Are there some lines that appear to have more problems with pressure control valves functioning properly than others?

A. Not being an expert on every line, that's hard to answer, but I would suspect there are a few lines there that have -- that I've heard that have PCV problems.

Q. Okay. Since you've said that you're not an expert on

every line and you've heard them, I'm just going to ask do any that you've heard about come to mind?

A. I know line 4 has a few PCVs that, you know, are problematic, or maybe not even at the station when they should be. I shouldn't say should be. They're just not there because they're getting fixed or had to be used for another control valve.

Q. Okay. All right. Since we talked about PCVs a bit, are there any other complaints that traditionally you hear commonly so like operators coming to you and saying, you know, this is driving me crazy, or could you please just note this, this is a problem for me? Are there any -- is there anything else that might have a common thread across the control room that you've been made aware of?

A. I guess kind of off the top of my head two things would come into mind. One would be nuisance alarms. I get quite a few of those from the operator saying that I'm receiving this alarm. Talked to people out in the field, they have no idea what it is or, you know, what its explanation is. So, we get that. So, a nuisance alarms or an MBS alarms is another one.

Q. Were those the two that you were thinking of --

A. Yes. Yeah, MBS alarms and nuisance alarms.

Q. On the nuisance alarms, is there a type that typically has been in your experience, or is that just kind of an in general statement?

A. That's in general. Each console would have their

nuisance alarms and they would be different, right. So, it would be more of a, not -- it would be more of a frequency alarm like so if they're receiving an alarm every minute for their whole shift, that would be irritating. So, that's when I say a nuisance, I mean the frequency of the alarm.

Q. Right. So, I'm going to call that a chattering alarm or a nuisance alarm, either one --

A. Sure.

Q. -- in the next part of the conversation. Are you capable of taking those off scan or do you have to refer that to the SCADA department?

A. No, we'd have to refer that to the SCADA department.

Q. Does that get done through a system or like do you pick up the phone and call them?

A. I guess if it, you know, if it's during the day we could call them and talk to them, but it would have to be approved to be taken off the system.

Q. And so when you say it would have to be approved, does that mean it has to go through approval process?

A. That's correct.

Q. Okay. And would that also be true as opposed to being taken off the system, would it be true to have the set point moved or the trigger point moved, or is that different?

A. Oh, of the alarm itself?

Q. Yes.

A. Yeah, it'd have to be approved as well.
Q. And do you know what that approval process is called?
A. No.
Q. Okay. Do you know if it involves multiple departments?
A. Yes, it would.
Q. How long does that typically take in your experience?
A. Oh, I couldn't answer that, Karen. Yeah, it's --
Q. That's fine.
A. Yeah.
Q. It was a broad question. So, I'm sorry I didn't ask it better. All right. So, we'll just move on to another topic, okay?
A. Sure.
Q. So, we're going to move off alarms for a minute and we're going to go on to column separation just in general. We believe that on shutdown of 6B column separation typically happens around the Leonard station area. Does that have any familiarity, does that statement have any familiarity to you?
A. No.
Q. All right.
MR. JOHNSON: And just for the record, Leonard actually is a pressure transmitter location.
MS. BUTLER: Oh, thank you.
MR. JOHNSON: It's a former station site, Karen. So, you're kind of correct, but just for the, like I said --

MS. BUTLER: Yeah, I thought it was --
MR. JOHNSON: -- for the record.
MS. BUTLER: -- a former station site and then it was still referred to on the schematics as a station site. So, I apologize for not --
MR. JOHNSON: No problem.
MS. BUTLER: -- (indiscernible) for a station, and thank you for that clarification.
BY MS. BUTLER:
Q. We've mentioned this in general, but I'm just going to ask it a different way to make sure that we're getting the input for a fact correct. Were you aware of any unusual activity going on on your shift associated with this Marshall incident regarding the SCADA system or various consoles in the room?
A. No.
Q. And when column separation happens, is that fairly frequent in your mind on certain systems?
A. On certain systems, yes.
Q. Is 6B one of them?
A. I don't know.
Q. Okay. All right. When an MBS alarm has triggered and it goes away, is it your understanding that you still have an adequate leak detection system running?
A. I guess if it's explained, like if it, you know, I trust the system. If the MBS alarm clears that means everything is

good.

Q. So, when you say I guess if it's explained, does that mean if the MBS analyst tells you something?

A. No, if the system that's in place gives you an alarm, it's saying something is abnormal. If it clears it means it is normal. So --

Q. Okay.

A. So, if we have column separation and it's saying, yeah, you're in column-sep and you put the column back together and then your alarm clears, that explains that, you know, it's back and that your volume in and your volume out is balanced.

Q. So, would that statement change, or your understanding of it change, if the column-sep was still there but the alarms still went away? Would that have any bearing on what you just said?

A. I'm sorry, say that again, Karen.

Q. Okay. I think in the string that you were just explaining to me that, yeah, an alarm came in from the MBS system and you had column-sep for example and the column-sep --

A. Yeah.

Q. -- went away and the alarm cleared, then you would think the system is normal.

A. That's right.

Q. Okay. So, changing that string of events just a bit, if you had an MBS alarm and it was -- and column-sep happened and the

column-sep didn't go away but the MBS alarm went away, do you believe you still have a leak detection system that's working?

A. No.

Q. Okay. So, the key for that is what? The key difference for you is what?

A. That column separation. So, if the operators know that there's a column separation there and that -- and our MBS alarm doesn't see that, I would say that it's not working accurately.

Q. Okay. So, on some systems during shutdown, and then as a result of shutdown, you also see them at startup, you typically have the column separation because of elevation differences or dynamics within that pipeline system, do you think everyone, or do you believe then that you have an active leak alarm, leak detection system in those circumstances?

A. If there's a column separation and it's an alarm, then it's accurately saying your balance in and out isn't accurate, you know. It takes you time to, you know, start the line and get it going from start to finish that, you know, I would say it is accurate if the information is correct.

Q. Okay. So, to your knowledge, if a particular line on shutdown typically experiences a column separation at a certain location, is there anything different that the operator is supposed to do in that event?

A. No, I don't think that there's anything different that they're supposed to do.

Q. Okay. When -- because you are, shifting gears on you a bit, going to your shift lead role as kind of a coach or mentor, in the operator's specific duties, do you as the shift lead ever assign certain operators duties or things they're supposed to be active in that do not have -- that are away from say operating their console or monitoring their console?

A. We don't assign, you know, I guess tell the operators that they have to do this, they have to do that, but through the performance evaluation process we have the opportunity to give, or we give the opportunity to the operators to take on some additional work if they want and they feel that they can support it. We don't by no means force them to do things that, you know, is going to take them away from their operating duties and that's communicated to them when they take on roles like this that operations come first and any objectives come second.

Q. And are they rewarded for doing that in any way?

A. Yeah, they're -- they -- they're rewarded in their development. So, a lot of times the extra work that they do is for their own development and so, obviously, they'll -- they're benefited from developing as -- in their careers, but also we recognize that extra effort as a strength to the control center and to themselves. So, during their performance evaluation process we will, you know, certainly take that into account when we do our year end ratings.

Q. Does -- are they allowed to do their work off shift?

A. They can do it whenever they want. Typically, it won't be done after their shift or when they're off shift.

Q. Is that because you simply can't due to the console setup or the systems or --

A. No, typically, it's not done because they don't want to do it on their time off.

Q. Okay. So, is there -- do you as the shift lead ever track whether or not this type of activity is done during a certain time, like --

A. During their shift?

Q. Yeah.

A. No. No, we don't track that. You know, we, we'll touch base with them throughout the months and see how they're progressing, but we don't follow a certain time period as to when they're doing it, you know, whether they're doing it from 9:00 to 11:00 during their shift. We don't follow any of that.

Q. Do you ever track whether they do those things during a non-heightened awareness time on their shift?

A. No.

Q. All right. Would you say the majority of controllers take on additional, or is that just a few, or how would you translate that in your experience in the control room?

A. I would say there's only a few in the room that would take on additional work as long as they were comfortable with it and could balance the two. A lot of the time the work that they

take on has a lot to do with what they're doing. So, you know, it keeps them involved and that, but not all the time will they, you know, it could be something outside of their operational duties that they're taking on. So --

MR. NICHOLSON: Okay. And, Karen, I'm trying to hold everybody to about 30 minutes apiece. So, do you have a lot more, or --

MS. BUTLER: Roughly, I think about ten, but I will break then. How's that?

MR. NICHOLSON: Yeah, why don't we go to Brian and give him a chance and then we'll --

MR. PIERZINA: All right. Thanks.

BY MR. PIERZINA:

Q. Real quickly, Darin, I want to go back. So, you guesstimated that maybe 85 to 90 percent of MBS alarms are on startups and shutdowns. So, what percent would be startups versus shutdowns?

A. Oh, 50/50. I don't know.

Q. Oh, is it 50/50?

A. I don't know, yeah.

Q. Okay.

A. Like it, I think it all depends on your line and how it drains off or how it's shutdown or operating limits it's, so.

Q. Okay.

A. So --

Q. Do you ever see any MBS alarms on idle lines?
A. On idle lines, meaning not running?
Q. Not running, right.
A. Just shutdown? Yeah.
Q. Okay.
A. Yeah.
Q. Is that rare or --
A. Yeah, I'd say rare. I'd say rare.
Q. Do you consider Aaron a technical expert?
A. Yes, I do.
Q. Okay. Give me a -- so, we talked about the ten minute rule, you know, seeing pressure at the next station. What other ten minute rules are there that would require a shutdown?
A. Off the top of my head, I don't know. I think there's, well, there's only the really the one ten minute rule that we've always referred to and that would be the startup and the, if you don't get your pressure. There's, I mean, to look at the procedures and remember every ten minute rule that's in there, I can't --
Q. Okay. So --
A. I can't answer that. So, there would be others in there right that, if you can't have an MBS alarm explained within ten minutes you'd shutdown, right.
Q. All right.
A. So, things like that.

Q. All right. Thanks.

MR. NICHOLSON: Ravie?

BY MR. CHHATRE:

Q. It was not my top question, but I'll just follow on that one with the ten minute rule.

A. Sure.

Q. Since I started this statement, questions, I guess. During your tenure, two and half years with (indiscernible) before that, how often the ten minute rule, exceeding ten minute rule has caused leaks?

A. Exceeding the ten minute rule?

Q. I --

A. Yeah.

Q. If you don't get the pressure that you want --

A. Yeah.

Q. -- in ten minutes to the next station down --

A. Yeah.

Q. -- and then you have to shut the line down.

A. Yeah.

Q. And then you find that the line had a leak.

A. Right.

Q. Has it ever happened?

A. Has it ever happened? Not that I recall.

Q. I want to start with my questions. When you exceeded ten minute rule and you guys decided to continue for another 10 or

11 minutes after that, was there any discussion between you and your, I guess, subordinate operators, and you had supervisors, and the, I guess, analysts, about contacting the custodian of the line immediately?

A. I wasn't aware that the ten minute rule was exceeded until after the line was shut down.

Q. Okay. But I mean --

A. But at that point the, I mean, the custodian or the MBS analyst or is that what you're referring to?

Q. Not the person was the, is analyst, but I believe he was in the communication room with you guys at that time.

A. Yeah.

Q. And so, do you know who the, it was indication of the operator and the specialist, do they discuss about contacting, and I understand the custodian for each line in your system (indiscernible). Am I correct?

A. It would be the --

BY MR. JOHNSON:

Q. Your line custodian.

A. The operator?

Q. That's, no, that would be, as it was explained to us, that would be, for instance, Ted Farquar (ph.) is a --

A. Oh, okay.

Q. -- one, so I think --

A. I don't know.

BY MR. CHHATRE:

Q. Was there a discussion about contacting the line custodian at that time?

A. Not that I'm aware of, no.

Q. Okay. Are you aware, I guess, that there is a line custodian for each line? You are not familiar with that?

A. Yes, there's --

Q. Do you know what line custodian for this particular line would be?

A. No.

Q. Did the operator know? Did the operator mention --

A. No.

Q. -- the custodian? Did the analyst mention line custodian?

A. Not that I'm aware of, no.

Q. Just for the record I'm asking this, the same questions and same discussion, did it happen after the 20 minute --

A. Yeah, I wasn't involved a lot with the MBS analyst when they're talking about custodians or anything like that. We --

Q. So --

A. -- yeah.

Q. -- you wouldn't even know they talked about the --

A. No. No, I didn't know that they would have even spoken to him or if there was any calls to him or not. I am not aware of it.

Q. Did you mention contacting custodian?
A. No.
Q. I guess my next question is, are there any guidance written, verbal, or understood, about contacting custodian, when the custodian should be contacted?
A. I have no idea when they contact them. We -- that's all MBS side of things. So, they -- we have no idea when they decide to contact them or not.
Q. So, you guys had no input to the operator, saying look, it looks like the problem is persisting, please get more help. Is it up to the analyst to decide?
A. Yeah. Yeah. Yeah, no, we don't get involved with any of that. That's all MBS. So --
Q. No, no. Okay.
A. Yeah.
Q. But I mean do you guys have any say at all requesting --
A. Oh, I'm sure --
Q. -- that that --
A. I'm sure we could. I mean that's certainly, yeah, we could probably ask that question.
Q. So, how long typically are, I guess, you already answered that question at the very beginning that you (indiscernible) analyst --
A. Yeah.
Q. -- why different kind of --

A. Yeah.

Q. (indiscernible), but in this case did anybody express concern that we are not getting adequate help on the problem, it's not getting resolved?

A. I didn't, but I, yeah. I didn't.

Q. Did it (indiscernible) in your mind that gee-whiz, we are not moving forward and we may need more help?

A. No. I felt, you know, I was comfortable with Jim Knudson and his expertise as a technical operator as well as an MBS analyst. So, I never once said we should get someone else involved from an MBS analyst --

Q. And what is --

A. -- perspective.

Q. -- (indiscernible) differently? What has to occur before you guys feel uncomfortable and request analyst to get custodian in the loop?

A. What has to occur?

Q. You said you didn't request --

A. Yeah, it --

Q. -- custodian.

A. I guess if they can't explain it or if they can't give us an idea of what is causing the alarm, then we can say, you know, can you look to your support or what, you know, if they have on-call support, you know, get more of their senior guys involved to look at it.

Q. Now, in your mind, what is the mass balance analysis alarm does to you? What it means to you? What does the mass balance calculations form like in you mind?

A. In my mind? MBS means there's an imbalance in your volume and your volume --

Q. But --

A. Yeah.

Q. -- the purpose of doing the mass balance calculations, what is the purpose in your mind for that?

A. The purpose of that is to track your volume. It's essentially volume accountability.

Q. Track, well, to (indiscernible).

A. No. It's to make sure your line is whole, like I guess is, I don't know how to explain it. We've got CMT to calculate your volumes in, your volumes out, but your MBS system tells you that your line is whole and has no anomalies, no holes, nothing, no leaks, anything like that. It's there to, you know, insure that there's pressure in your pipeline.

Q. Okay.

A. I guess not to insure there's pressure in your pipeline, but to indicate that there's pressure --

Q. Indicate pressure --

A. Yeah.

Q. And do you consider that as a key part in the detection or site benefit of the detection? How -- and where do the

detection come into the picture, I guess, in your view?

A. In my mind, I think MBS is a great tool to have because it's, you know, somewhat real time pressure analysis of your line as a whole. Whereas if an operator relied solely on his pressures on his line and his volume in and out, it may be hours and days before you ever realize there's any kind of problem. But, you know, I believe it is an asset to the pipeline system.

Q. Do you look at that as a leak detection tool or not?

A. It's one of.

Q. Okay.

A. One of the leak detection tools we use.

Q. And that's all I have, but I really appreciate --

A. Okay.

Q. -- your really candid answers.

A. Okay.

BY MR. NICHOLSON:

Q. I got some more, Darin, sorry. It's just the nature of the beast. I'm going to start with you were aware that the pumps at Marshall shut down on suction at --

A. I am now.

Q. You are now.

A. Yeah.

Q. Okay.

A. Yeah.

Q. Okay. What is -- why do pumps shut down? Why does the

station shut off pumps on low suction? What's it meant to do?

A. There's nothing feeding the pumps so it starves and shuts down. So --

Q. Like cavitate or --

A. Right.

Q. Okay.

A. Yeah.

Q. So, then when you go to start up the line, isn't there still zero pressure and suction?

A. There's zero pressure at the station there.

Q. So --

A. At Marshall.

Q. -- how do you start pumps? The station cuts out the pumps at zero pressure. How do you start them on startup? How do you override that?

A. You feed from upstream station. So, at Mendon --

Q. Yeah.

A. -- so you start a pump at Mendon and your pressure gets to Marshall and you went for your pumps to -- wait for your pressure to get to Marshall and then once you get pressure there --

Q. Above a certain limit.

A. Yeah, above a certain limit, you can start your unit.

Q. But I don't see any pressure build on suction in Marshall emitted.

A. Right. It builds at four pounds.
Q. That was the discharge, though, right? Did the suction pressure build?
A. I don't know.
Q. The suction has to get above --
A. Yeah.
Q. -- that threshold before you can start.
A. Right. And typically, when the pressure comes to your station it's going to go right through, right. So, your suction discharge should come up at the same time unless you had your PCV closed.
Q. Okay. My trends don't indicate a buildup on the suction side. I guess I can look at that further, but even if you'd only built it -- if you built a, if you say to equalize and I see three pounds on discharge, you would only have had three pounds --
A. Suction, right. So, at --
Q. That's still below your --
A. Right. So, you can't start it.
Q. So, he could never have started. He never started Marshall.
A. I don't know if he did or not on the prime initial.
Q. But he had to because he got four pounds, right?
A. No, because that's built from upstream.
Q. Oh, that was all coming from Mendon.
A. Yeah.

Q. Okay.

A. Yeah. So, we got Mendon running trying to build pressure to start Marshall and no pressure gets there.

Q. Okay.

A. So, we never get to start Marshall.

Q. That's right. Going back to procedures, is there anything in the procedure that says you have to notify your management within a certain amount of time?

A. I don't recall if there's a certain amount of time, but I know once, yeah, like the procedures, we got so many, I can't keep track, but looking at, or thinking back at it, there's a point in your procedure where it says start to notify management and --

Q. And you say before you start the line again.

A. Yes.

Q. -- right? Okay.

A. Absolutely. So --

Q. And there's nothing that says you can wait ten hours before calling management.

A. Right. Exactly. Yeah. There's nothing there. It just says notify, you know, shutdown the line after your ten minutes. Notify. So, you know, at that time we're trying to get information before we make a phone call.

Q. Okay. You mentioned Ghazal pulled up a pending procedure.

A. I do believe so. I think that's where Aaron got it from. I don't --

Q. Oh, that's right. That was with --

A. Yeah.

Q. -- Aaron not so much you.

A. No, because that's -- so, after the phone call --

Q. Yeah.

A. -- that we get from Tim --

Q. Right. Well, ten --

A. -- saying we got ten minutes.

Q. Yeah.

A. Aaron goes to the console and then starts talking to Tim and I think at that point that's where Ghazal brings up a pending procedure or revised procedure which probably hasn't been approved, and that's the procedure that Aaron went by, just maintain the refined running.

Q. As a shift lead, why would you use a -- you would know better as a shift lead to use --

A. Well --

Q. -- a pending procedure, wouldn't you? Or --

A. Like I didn't even know the procedure was there.

Q. Okay.

A. So, I think, and Aaron can speak for this and I don't want to speak for him and --

Q. Well, I'm talking --

A. -- what the decision --
Q. -- specifically if ever --
A. Yeah, no.
Q. -- an operator and let's say, hey, Darin, I got this pending procedure.
A. Yeah.
Q. Can I use it?
A. Yeah, you'd have to question where it is, you know, where is it? Where did you get it from? Like --
Q. Why do they even have access to the pending procedures?
A. I don't know. I don't know. I don't know where they got it from or where it was.
Q. But I mean, you're the shift -- the shift lead is --
A. Yeah.
Q. You're their boss.
A. Yeah.
Q. Right? So, okay.
A. Yeah, the procedures that --
Q. You would know -- you should know better if they don't, right, or any --
A. Well, no --
Q. -- not necessarily you, but a shift lead would know better than --
A. Yeah, and that's kind of a tough one because the procedures, most of those procedures are directly involved with

the operators. So --

Q. Okay.

A. -- you know, they got 1 to 5 and then we get involved. So, sure, we'll know more of the majority of the severe or the emergency procedures because we deal with those more so than it's their routine maneuvers or their standard procedures that are directly linked to their lines.

Q. Okay.

A. So, a lot of that information we wouldn't, you know, there's no way we can follow or remember or understand any of those procedures, but mostly the emergency procedures we would know.

Q. Okay.

A. So, to say that, like I wasn't aware that there was even a procedure there that had a pending or --

Q. Is it stamped pending on the --

A. No, I don't recall. I think it looks exactly like a regular procedure.

Q. It's in the same system that you would go to here?

A. You just click on a --

Q. Okay.

A. -- click on a different tab and it's there kind of thing. Like it's --

Q. All right.

A. Yeah.

Q. Now, extending beyond the ten minutes on startup, is that something you've done before?

A. I've never done it, uh-uh.

Q. You've never done it?

A. No.

Q. Okay. So, this -- were you aware that they extended beyond the ten minutes?

A. No.

Q. So, that wasn't even brought to your attention.

A. No. That was -- I got involved with this after the line was shut down.

Q. Right. So, that wasn't even something you were aware of.

A. No.

Q. So, you probably could not have communicated that to Blaine --

A. Right.

Q. -- on the phone call.

A. Right. Well, I, and I might have, going back to, I don't know. I can't remember what I talked to Blaine about in there. I could have said, like Aaron might have told me at that point, hey --

Q. Okay.

A. -- we're down. We extended it. I went by this procedure, that information, and I could have passed that on to

Blaine. Whether I did or not, I don't recall.

Q. I just wanted to clarify what I said to you before. I said, you know, wouldn't it be best to assume a leak. I didn't necessarily mean follow the confirmed leak procedure, but it looked like to me if you almost go through your suspected leak procedure that it's got sufficient detail. It's one of the few procedures I think I've seen that actually has some decent detail to it. It asks you to notify shift leads, establish initial time of the anomaly, and then it kind of forces you to go back and look for leak triggers.

A. Yeah.

Q. That's where I was going with this because it looks like if you would have suspected a leak to begin with, it would have forced you guys to go back to the suspected leak trigger procedure, which is fairly decent. I mean it's almost your checklist, right?

A. Um-hum.

Q. And it tells you if there's a sudden drop in upstream pressure, and I think one of them is even if one or more (indiscernible) are shutdown or locked out, that's a leak trigger. And --

A. Right.

Q. -- we're saying Marshall, couldn't start Marshall, right? It was kind of locked out.

A. Yeah. Now, in that procedure, that refers to while

running. So, if you're running and upstream stations start locking out while you're running --

Q. Uh-huh.

A. -- then that's what that refers to.

Q. Okay.

A. But the stations that were locked out were locked out prior to our startups due to maintenance. So, it, like --

Q. Well, Marshall would have been locked out. You couldn't start Marshall because you didn't get the pressure, right?

A. Right. But that's --

Q. It's --

A. That's -- that, so we haven't gotten to Marshall yet our pressure when we're starting. So, we actually haven't got to Marshall yet.

Q. Okay.

A. So, from that point to -- I don't think --

Q. It doesn't really meet the definition.

A. Yeah.

Q. Okay.

A. Yeah.

Q. But I don't see anything in here that says --

A. Like I don't --

Q. -- it's only for running conditions, so --

A. Right.

Q. -- for leak triggers.

A. Right. And that's, yeah, exactly, it's got to be under running condition. So, the unit will lock, well, that refers to running condition. So, if a unit does lock out due to low suction or high temperature, you know, it could be a leak trigger.

Q. Okay.

A. So, I don't even recall if Marshall was locked out at the time of the startup. I don't believe so because we were waiting for pressure there to start a unit. So, the units must have been available.

Q. So, the unit will show available even though the suction is lower than the --

A. Yeah.

Q. -- cut out --

A. Yeah.

Q. Okay.

MR. NICHOLSON: Okay, Karen, that's all I have. Do you have anything more?

MS. BUTLER: Okay. Do you need a stretch or are you doing okay still?

MR. PARSONS: Just cold.

MS. BUTLER: Sorry. Anything they can do about that in their room?

MR. PARSONS: No, that's all right. Go ahead, Karen.

MR. JOHNSON: We started hot, now we're cold.

MS. BUTLER: Okay. All right.

BY MS. BUTLER:

Q. So, I want to go back to the, a little bit about we were talking about some additional activities that certain operators can take on if they chose to and I want to talk to your shift lead responsibilities for just a second. When you have a problem employee, someone that's not performing up to where you think they should be, what do you typically do with a problem employee?

A. I guess, that's kind of, I guess, a broad question. So, I'll try to answer it as best I can, Karen. It depends on what the problem is. If it's persistent, if it's a problem that they've had over the years, then obviously that becomes a development or somewhat of a growth opportunity for them to work on.

If it's something, you know, happens and when I say if something happens, I'm referring to, I guess an attitude problem or a complaint or, you know, verbally expressing their opinions maybe when they shouldn't be or when they are, they're doing it unprofessional. Something like that would, I would address it, you know, behind close doors, one on one immediately, you know, talk to them about it, talk to them about the impacts it had and can have on a room, like the control center, and correct it as soon as I could.

Q. So, is there ever a time in your recollection or on your shift lead responsibilities where with a problem employee you assigned additional work for development?

A. No. No. It's, a lot of that is not additional work for development and usually that's -- that becomes a -- that's more of the how portion of -- and when I look at it as a problem, I look at it as the how. I mean, and when I say how, meaning their professionalism, their representative of Enbridge values, and the vision, you know. I would give them, you know, the information that, how they influence others and give them direction to work on that. That's not more additional activity.

Now, someone that maybe isn't hydraulically strong or, you know, is struggling with the concept, you know, I would give them, and that would be more of their what in their performance documentation, I would give them opportunities to help develop that. So, whether it's giving me printouts of the line profile on a day, trying to eliminate throttle and efficiently and effectively run their pipeline, but maybe running it efficiently isn't one of their strong suits. So, I would give them that type of objective for a year where it doesn't impact their performance. It's actually supporting it.

Q. Have you ever given anything like that to, I believe it was Tim Chebber [sic] that was on with you. Do I have that correct?

A. No, I've never assigned anything to Tim on that.

Q. Okay. All right. And have you ever used him as the resource in the room, maybe not on his console, but asked him questions about how to handle another problem on another console?

A. I never have, Karen.
Q. Have others that you're aware of?
A. They may have. They may have asked him for -- I don't know, you know what, I can't answer that.
Q. That's fine. Okay.
A. Yeah.
Q. Okay. We talked a little bit about job profiles, I think, and job, or performance reviews. Is there any other document that kind of feeds into that, like say a job description or core events are identified or core responsibilities are identified somewhere else?
A. Well, we have a job profile that outlines the roles and responsibilities of the operators and that breaks it down to the level of experience and of the operators as well. We have different classifications, operator 1, operator 2, operator 3. And each one of them has a different role and responsibility. Obviously, operator 3 having more responsibility because of their experience and knowledge, and so we do have that documentation. It tells you a little bit about their roles and responsibilities as an operator as that -- at that level. And that information is similar or tied into our performance evaluation.
Q. Okay. Thanks for explaining that. On the 360, do the operators ever give you a 360 review or give Curt a 360?
A. Sorry, I'm not familiar with a 360.
Q. That would be a reverse performance review, meaning that

they provide input into your performance and how to make it better?

A. Yeah, I do believe so. I know that other shift leads and other technical analysts and that are poled to see what our, you know, to get a, I guess get a feel of where we are. I'm not too sure if they ask the operators or not --

Q. Okay.

A. -- about our performance. I'm not too sure.

Q. Okay. Are you asked to provide feedback into Curt's performance?

A. Yes, I am.

Q. Okay. All right. And as far as you know, has any of that ever been relayed?

A. Has it been relayed to?

Q. Curt.

A. The performance? I don't know. I don't know if it's -- we give our feedback and what they use it for --

Q. Okay.

A. -- it's up --

Q. That's fine.

A. Yeah. I have no idea.

Q. Okay. I'm going to shift gears a little bit. Have you ever been made aware of CMT problems in the room?

A. Yes.

Q. Is that fairly frequent?

A. Yeah. Usually it's the system is really slow, those type of problems. Not so much the functionality of it, but more the performance, like the, you know, how does it, you know, it's really slow. It's bogged down. It's locked up, that kind of thing.

Q. Okay. Are there any other systems similar to that that you can think of that have caused you to hear about it?

A. No. I mean from the tools that we use in the control center, FacMan has its problems and CMT as well.

Q. What's the FacMan issue that you're aware of?

A. I mean there's the actual process. The tool, itself, is not user friendly and I mean it's not user friendly. It doesn't -- it's not interfaced really well with the field staff and --

Q. Okay.

A. Yeah.

Q. All right. Is that -- and most of the operators have to interface with FacMan if I understand it correctly. Do you have to interface with FacMan quite a bit?

A. Just the reports themselves. We -- the, really the only time I use FacMan is for sending our reports to external departments.

Q. Okay. Now, this next question is in regards to like your interaction and understanding of say with the SCADA department or with an engineering department or with say batching

or scheduling I guess it's more appropriately called out of Calgary, have you had any problems with expertise in other departments that you're trying to interface with?

A. Not that I'm aware of, Karen.

Q. Okay. Thank you. You mentioned previously, shifting gears now, something about an MBS alarm can be the result of a drag reducing agent.

A. Yes.

Q. Can you explain that a little bit more to me or your understanding or how that's related?

A. Just, I'm, I guess with line 1 we run that DRA on the line when we're -- when we have crude products, through certain stations and when the DRA is on or when it's off, every time they turn it on, for example, they'd have to notify MBS to say we're running -- we've got an MBS alarm. We've started our, using our DRA. So, the MBS model isn't accounting for it, I guess.

Q. Okay. So, that might be something that -- the notification issue that just allows the MBS analyst to make some adjustments.

A. That's right. So, yeah, when they turn on a pump or turn off a pump, the model, itself, can't see that it's on or off so it -- and it's adjusting the profile of your line because of its reduction in drag.

Q. All right. If an MBS analyst comes to you and tells you that there's a column sep or that you need more horsepower or

there is a transmitter out or a whole host of possibilities, do you ever question what they tell you?

A. Yeah, we'll question it. You know I'll certainly question where it's at, what it is. Do we have redundant transmitters? We question that to actually, you know, to get, I guess, more information on it.

Q. Okay. So, there would be follow-up questions to identify more about what was said.

A. That's right.

Q. Okay. So, if an MBS analyst tells you that it's a false alarm, do you question that?

A. No, I wouldn't.

Q. Okay. Do you think an operator would?

A. No.

Q. Okay. You mentioned previously that besides the leak detection system you have other leak detection tools that you can use. Can you name some of those for me?

A. Well, leak detection tools, would be CMT would be one of them, right. So, your volume accountability, so, in and out.

Q. Okay.

A. Yeah. Pressure, I guess our pressure trends. We can monitor pressure trends. Yeah, and I guess SCADA, right. We're -- much like what Matt described about pumps locking out. I mean those are the tools that we'd be using. We'd be using SCADA to, you know, find leak triggers.

Q. Okay. Let me catch up here. I've had to take notes. Typed a lot right there. Has the MBS itself ever helped you on a shift detect a leak?

A. No, I don't think I've ever been a part of a leak where, you know, it's detected it or been involved with that.

Q. Okay. Has it helped you find other types of problems?

A. Certainly, yeah. The transmitter problems, you know, equipment problems on the line. So, if we have a flow meter that's not calibrated properly and it's not helping the MBS system, then we would address that transmitter and have it calibrated.

Q. Okay. Got you. Is there anything besides equipment problems that stands out in your mind that has helped you detect?

A. No. No.

Q. All right. I'm going to shift gears a little bit to a couple of things that I know that you said you had been involved with, okay, on the day of your shift regarding Marshall. And I noticed that you mentioned pressures and flow trends that you were reviewing those. Did you let the operator know that you were doing that?

A. I don't recall if I did or not.

Q. Okay. Do you think there's a chance that he or his shift mate may have known that you were checking pressures and trends?

A. Yeah, they may have. I mean, I was back and forth when

I was looking at those transmitters trying to find out, you know, talking to them about CMT. Trying to find out when their startups and shutdowns were and trying to figure out the drain on the line throughout all those.

Q. Okay. So, you were back and forth between your desk and their desk --

A. Yeah.

Q. -- there. And so there could be verbal conversations going on that we wouldn't necessarily have a recording of?

A. Yeah, oh, yeah. There's -- there are a lot of those.

Q. Okay. And then I think my last question for you is in regard to the MBS system itself and the bypass associated with Niles, we know from understanding what Jim was working on that he had discovered by looking at pressure profiles that Niles had a problem and a discrepancy and he had gone over and talked to the desk as well about some issues and was determining that, yes, in fact, Niles' pressure profile looked odd and so he was headed back to make some changes regarding the bypass situation to the model. Were you aware of that?

A. I don't remember, Karen.

Q. Okay.

A. I don't remember if he --

Q. It's nothing that stands out in your --

A. No. No.

Q. Okay. All right. That's all I needed. And I think

with that, I'm finished. So, thank you so much.

A. Thanks, Karen.

MR. NICHOLSON: Okay, Brian, anything else?

MR. PIERZINA: Nothing.

MR. NICHOLSON: Jay?

MR. JOHNSON: No.

MR. NICHOLSON: Ravie?

MR. CHHATRE: No. Thank you so much.

MR. NICHOLSON: I think I'm done as well.

So, with that we'll conclude this interview of Darin Parsons.

Thank you, Darin. Thank you.

MS. BUTLER: Thanks, Darin, a lot.

(Whereupon, the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: ENBRIDGE OIL SPILL
MARSHALL, MICHIGAN
Interview of Darin Parsons

DOCKET NUMBER: DCA-10-MP-007

PLACE: Edmonton, Canada

DATE: December 17, 2010

was held according to the record, and that this is the original, complete, true and accurate transcript which has been compared to the recording accomplished at the hearing.

_____
Mary Anne Jones
Transcriber