

**Docket No. SA-534**

**Exhibit No. 2-CF**

**NATIONAL TRANSPORTATION SAFETY BOARD**

**Washington, D.C.**

INTERVIEW OF MICHAEL VALENTI, PG&E  
(JAN-4-2011)

(86 Pages)

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of:

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PACIFIC GAS & ELECTRIC COMPANY

\*

SEPTEMBER 9, 2010 INCIDENT

\* Docket No.: DCA-10-MP-008

SAN BRUNO, CALIFORNIA

\*

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\* \* \* \* \*

Interview of: MICHAEL VALENTI

Marriott Hotel  
San Francisco Airport  
1800 Bayshore Highway  
Burlingame, California 94010

Tuesday,  
January 4, 2011

The above-captioned matter convened, pursuant to  
notice.

BEFORE: RAVINDRA CHHATRE  
Investigator-in-Charge

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I N T E R V I E W

1  
2 MR. CHHATRE: Good morning, everyone. Today is Tuesday,  
3 January 4th, 2011. We were currently in Burlingame, California at  
4 the San Francisco Airport, Marriott. We are meeting in regards to  
5 the investigation of pipeline rupture in San Bruno, California  
6 that occurred on September 9th, 2010. The NTSB accident number  
7 for this is DCAMP-10 -- I'm sorry, DCA-10-MP-008.

8 My name is Ravin Chhatre. I'm with National  
9 Transportation Safety Board, and I'm investigator in charge of  
10 this accident.

11 I would like to start by notifying everyone present in  
12 this room that is at this interview it is being recorded for  
13 transcription at a later date. All parties will get a copy of the  
14 transcripts when they are compiled.

15 Also, I would like to inform Mr. Michael Valenti that  
16 you are permitted to have one person with you during this  
17 interview. That person can be any person of your choice. It can  
18 be a supervisor, a friend, a family member or if you choose,  
19 nobody at all. So, for the record, please state your full name,  
20 spelling of your name, your contact information like email,  
21 telephone, postal mailing address, and whom you have chosen to be  
22 present with you during this interview and please spell all the  
23 names for the transcriber.

24 THE WITNESS: Good morning. My name is Michael Valenti,  
25 V like Victor, a-l-e-n-t-i. Email address is -----.

1 My phone number is -- home phone is ----- . My mailing  
2 address is my home address which is ----- in  
3 ----- . I've chosen my attorney to -- my  
4 attorney, Dane Jaques, to be my representative today.

5 MR. CHHATRE: Thanks. Now I would like to go around the  
6 room. Each person should identify themselves, state your name,  
7 spelling, title, organization you represent, email address,  
8 business phone, and we'll start from the city.

9 MR. CALDWELL: The City of San Bruno. My name is Geoff  
10 Caldwell. All my information's on the card provided.

11 MR. FASSETT: Bob Fassett, PG&E.

12 MS. JACKSON: Connie Jackson, City of San Bruno, my  
13 information's on the card.

14 MS. FABRY: Klara Fabry, San Bruno, you have the  
15 information on the card.

16 MR. SHORI: Sunil Shori, California Public Utilities  
17 Commission. My information is contained on the card.

18 MR. GUNTHER: Karl Gunther, National Transportation  
19 Safety Board, Operations Group Chairman, karl.gunther@ntsb.gov.  
20 Phone, 202-314-6478.

21 MS. MAZZANTI: Debbie --

22 MR. KATCHMAR: Peter Katchmar, USDOT, Pipeline Hazards  
23 Material Safety Administration, and I submitted my card.

24 MS. MAZZANTI: Debbie Mazzanti, IBEW Local 1245, and I  
25 submitted my card.



1           MR. SPERRY: Joshua Sperry with Engineers and Scientists  
2 of California Local 20, IFPTE. I submitted my business card.

3           MR. NICHOLSON: Matthew Nicholson, NTSB, M-a-t-t-h-e-w  
4 N-i-c-h-o-l-s-o-n, matthew.nicholson@ntsb.gov.

5           MR. CHHATRE: Ravin Chhatre, National Transportation  
6 Safety Board, Investigator in Charge. The spelling is R-a-v-i-n-  
7 d-r-a, last name C-h-h-a-t-r-e. Email, ravindra.chhatre@ntsb.gov.  
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9           MR. NARVELL: Rick Narvell, Human Performance  
10 Investigator with NTSB in Washington, D.C. Phone is 202-314-6422  
11 and email is narvelr@ntsb.gov.

12           MR. JAQUES: Dane Jaques on behalf of the witness and  
13 all of my information is on the business card I submitted.

14           MR. CHHATRE: Well, let's begin with Karl.

15           MR. GUNTHER: Okay.

16                           INTERVIEW OF MICHAEL VALENTI

17           BY MR. GUNTHER:

18           Q. Mr. Valenti, could you give me your job title and  
19 affiliation?

20           A. I am a operator for the Gas System Operations Department  
21 with Pacific Gas & Electric Company.

22           Q. And where do you work?

23           A. In San Francisco at 77 Beale Street.

24           Q. And, do you work on the SCADA system there?

25           A. Yes, I do.

1 Q. Okay. Basically what you do is describe what you've  
2 done since the accident. Since you have been previously  
3 interviewed, I want you to go from what you've done since the  
4 accident.

5 A. Hmm.

6 MR. FASSETT: Bob Fassett, just clarification. You want  
7 him to describe his daily duties? Is that what you're asking?

8 MR. GUNTHER: Whatever --

9 BY MR. GUNTHER:

10 Q. Let's just say can you tell me any significant findings  
11 that you have found -- or discovered since the accident? Have you  
12 -- or did you do any investigations and things that were  
13 significant --

14 MR. FASSETT: Okay, just point of clarification, Bob  
15 Fassett, he's not part of the investigation. He's -- after the  
16 incident, he went back to his daily job.

17 MR. GUNTHER: All right.

18 MR. FASSETT: He wasn't brought in to do any  
19 investigation of this incident.

20 MR. GUNTHER: All right.

21 BY MR. GUNTHER:

22 Q. Well, then that's your -- can you go ahead and give me  
23 that, you know --

24 A. I went back to my daily job.

25 Q. Okay. And then you found nothing unusual? Or, as --

1 have you seen anything unusual in your -- in the SCADA system?

2 A. No.

3 Q. Okay.

4 A. Our equipment is operating correctly.

5 MR. GUNTHER: All right. I'll go ahead and --

6 MR. CALDWELL: Geoff Caldwell, no questions at this  
7 time.

8 MR. FASSETT: Bob Fassett, no questions at this time.

9 MS. JACKSON: Connie Jackson, no questions.

10 MS. FABRY: Klara Fabry, no questions.

11 MR. SHORI: Sunil Shori, with California PUC.

12 BY MR. SHORI:

13 Q. I think first time you were here we had discussed a  
14 basic San Bruno gas incident timeline, I think, that had been put  
15 together by the company and submitted to us and I had some -- just  
16 some follow-up questions --

17 A. Okay.

18 Q. -- related to that. One of the indications from that  
19 timeline was -- and this is around 4:20 p.m. on 9/9, supervisor  
20 control and data acquisition directs many low and low alarms at  
21 Milpitas. And this is, again, 4:20 to 4:32. Why would you have  
22 low and low alarms? Do you recall why you had low and low alarms  
23 at that stage on 9/9?

24 A. It was due to the active clearance going on, the UPS  
25 clearance.

1 Q. How would that clearance -- or how did that work entail  
2 getting a low alarm? What would cause the valves to basically  
3 close down?

4 MR. FASSETT: Point of clarification, the low alarm,  
5 does that mean the valves close down?

6 MR. SHORI: Well, it means the pressure's reduced.

7 THE WITNESS: No, not in this case. It was a UPS  
8 clearance. Communications were not something that we could  
9 actually monitor because of the type of clearance that was active.

10 BY MR. SHORI:

11 Q. Okay, so, but I mean the alarm is going to go off --  
12 it's based on pressure changes, right?

13 A. Like Bob Fassett was saying, we maybe receive low or low  
14 alarms on the alarm summary but they're not real. They weren't  
15 real due to the clearance that was going on.

16 MR. FASSETT: So, to clarify, you weren't relying on  
17 SCADA; you were relying on direct communication with Milpitas  
18 during the clearance; is that correct?

19 THE WITNESS: That's correct.

20 BY MR. SHORI:

21 Q. I see. So your gas control tech, Oscar Martinez,  
22 reports to gas control that the installation of a new  
23 uninterruptable power source said Milpitas terminal should not  
24 impact the Milpitas station during the clearance. So if there  
25 should be no impact, why would you get those alarms?

1           A.    Well, the type of clearance that was going on is a UPS  
2 clearance where we actually lose communication of that particular  
3 station where it's -- we're actually unable to monitor that  
4 station and so all of our communication is relied upon the  
5 personnel in the field via phone calls.

6           Q.    Okay, so at 5:25 gas control calls Milpitas station to  
7 discuss high high alarms. Milpitas gas control tech confirms  
8 there will be action needed to address the high high. So by that  
9 stage you are seeing the data again, or you're still -- you're  
10 seeing SCADA again?

11          A.    SCADA was going in and out throughout that whole  
12 clearance. There were pressures and flows and valves that were --  
13 that we could not rely on because of the clearance.

14          Q.    And was there any direction provided in that regard in  
15 terms of what action would be needed to address that? Was there  
16 anything indicated to you or did you indicate anything to anyone  
17 in Milpitas in terms of what action would be done to do -- to  
18 address that?

19               MR. JAQUES: To address what?

20               BY MR. SHORI:

21          Q.    The -- basically that there's high high alarms at  
22 Milpitas station, which seems gas control is seeing.

23               MR. JAQUES: Can we go off the record for a second?

24               MR. CHHATRE: Yes, off the record.

25               (Off the record.)

1 BY MR. SHORI:

2 Q. The passage is "gas control calls Milpitas station to  
3 discuss high high alarms. Milpitas gas control tech confirms  
4 there will be action needed to address the high high alarms. So  
5 what I'm asking is what action would -- was indicated to you that  
6 would be needed, or what would be done?

7 A. None to me. I did not make that call.

8 Q. So do you know who in gas control made that call?

9 A. I do not.

10 Q. At 5:51 to 5:52 there's a passage that reads "Gas  
11 control changes three regulation set points, PLS 7A and PLS 7B and  
12 Sheridan Road line 131 to 370 PSIG." Were you involved in that  
13 change?

14 A. No, I was not.

15 Q. Do you know who was?

16 A. No, I do not.

17 Q. The only gas controllers at that stage -- now, who would  
18 be the gas controllers in that time frame, then, capable of making  
19 those kinds of changes?

20 A. When you say gas controllers, do you mean the gas system  
21 operators?

22 Q. Gas system operators, yes.

23 A. The ones capable were the three on duty; myself, Barry  
24 Mitchell, and Larry Rucholz.

25 MR. JAQUES: Do you mean to also include supervisors as

1 well in your question?

2 MR. SHORI: I mean to include everybody. And somebody  
3 gave a direction and somebody carried it out.

4 THE WITNESS: Well, those would have --

5 BY MR. SHORI:

6 Q. And what I'm trying to understand is who gave the  
7 direction and who carried it out.

8 A. The order would have come via gas logging system or  
9 verbally through a transmission coordinator or a senior  
10 transmission coordinator in the room and who gave that order to  
11 who I don't know exactly. Or how it was presented.

12 MR. KATCHMAR: This is Peter Katchmar with DOT.

13 BY MR. KATCHMAR:

14 Q. Could you say those two names again and spell them,  
15 please? Barry Mitchell and the other guy?

16 A. Do you need the spelling of Barry Mitchell? B-a-r-r-y  
17 M-i-t-c-h-e-l-l. The other gas system operator is Larry Ruccholz,  
18 L-a-r-r-y and his last name, I believe it's R-o-c-h-h-o-l-z.

19 MR. FASSETT: R-u -- excuse me, it's R-u-c-c-h-o-l-z,  
20 R-u-c-c-h-o-l-z.

21 THE WITNESS: Thank you.

22 MS. MAZZANTI: It's witness 28.

23 MR. FASSETT: And Barry Mitchell is witness 29.

24 BY MR. SHORI:

25 Q. Okay, so just so I get this clear, so the directive

1 would have come either from the transmission coordinator or the  
2 senior transmission coordinator, either of whom is in the room?

3 A. That's correct.

4 Q. And the only persons that could have carried it out  
5 would have been yourself, Mr. Mitchell, or Mr. Ruccholz?

6 A. That's correct.

7 Q. Do you -- even though you may not have carried out the  
8 order or done -- basically made any of the operational changes, do  
9 you recall any discussions related to that activity taking place?  
10 And by that activity, I mean in regard to POS 7A, POS 7B and line  
11 131 Sheridan Road station?

12 A. I did overhear the order verbally being given in the  
13 room while I was on the phone.

14 Q. Okay. And who was giving that verbally?

15 A. I'm not sure if it came from Mark or Joaquin and I'm not  
16 sure if it went to Larry or Barry and who actually did the order.  
17 I was on the phone at the time.

18 Q. So that's a new name. Joaquin?

19 A. Joaquin Genera?

20 Q. Yeah.

21 A. You've actually interviewed him before.

22 Q. We have, but you didn't indicate him as being one of the  
23 folks -- well is he one of the transmission coordinators or the  
24 senior --

25 A. Yes, he is the transmission coordinator.



1 Q. Okay. Sometimes you lose names and titles.

2 A. Sorry.

3 Q. And anything more in regard to why that would be done  
4 that you heard in regard to it being given, or the concern behind  
5 it?

6 A. Well, I believe the order was coming because of the  
7 unreliable information we were seeing at Milpitas. They wanted to  
8 go to the two stations upstream of Milpitas and lower that  
9 pressure that was entering Milpitas.

10 Q. Was there a concern at that point that the equipment  
11 within Milpitas that would be designed to contained that wasn't  
12 working or wasn't doing its job?

13 MR. FASSETT: It's speculation.

14 MR. SHORI: Well I --

15 MR. FASSETT: You're asking him to speculate.

16 MR. SHORI: I'm ask --

17 MR. FASSETT: He doesn't know. He's already informed  
18 you he doesn't know --

19 MR. SHORI: I'm asking him --

20 MR. FASSETT: -- and he wasn't a part of it.

21 MR. SHORI: -- based on what he heard if he is -- if he  
22 -- what he heard. So I'm not asking him to speculate. I'm asking  
23 him based on what he heard if there was any concern. If he didn't  
24 hear that, he can say so.

25 MR. FASSETT: You're asking him to speculate on

1 something he may have --

2 MR. CHHATRE: Off the record for a second.

3 MR. FASSETT: -- overheard during the discussion while  
4 he was assigned to do something else.

5 (Off the record.)

6 BY MR. SHORI:

7 Q. Mr. Valenti, did you hear anyone express concern that  
8 the regulating equipment within Milpitas wasn't functioning and  
9 there was some need to go back to equipment feeding into Milpitas  
10 to control flow?

11 A. No.

12 Q. According to some of the updated information we've  
13 received, Milpitas line 101 between 17:53 hours and 18:02 hours is  
14 registering 393 pounds. How do you recall that comparing to what  
15 the set points on the over pressure protection devices work at  
16 Milpitas?

17 A. Can you repeat that, please?

18 Q. Yeah. The pressure data that we've received for 9/9/10  
19 at least at Milpitas line 101 pressure at M32, it's showing 393  
20 pounds for at least 17:53 hours to 18:02 hours. How does that  
21 compare to what the over pressure protective devices at Milpitas  
22 were set to control?

23 A. The monitors, I believe, are set at 385 at that time and  
24 so the pressure that you're indicating is above the maximum  
25 allowable operating pressure. However, again, with an active

1 clearance going on, those pressures were all over the place. They  
2 were zero at times. I think it was even 600 for a few seconds.  
3 Then the -- it wasn't information that we could rely on.

4 MR. FASSETT: Bob Fassett, point of clarification. The  
5 monitor is not at set at the MAOP. The monitor is a set point.  
6 The MAOP of the line was 400 pounds.

7 BY MR. SHORI:

8 Q. The equipment that we're -- same reading point, M32  
9 starting at 17:23 hours starts at 381 pounds and there's a gradual  
10 build by the time it gets to the 393 that we're -- that we  
11 mentioned earlier. So why would you not have reliability in that  
12 reading?

13 A. Because of the clearance that was active.

14 Q. After the POS 7A, 7B and line 131 were turned down, did  
15 you see a -- start to see a reduction in your system at monitoring  
16 points up north of Milpitas at various SCADA points?

17 A. I don't recall.

18 MR. FASSETT: Bob Fassett, PG&E. Were you the JSO  
19 assigned to that task?

20 MR. VALENTI: No.

21 MR. FASSETT: Thank you.

22 MR. CHHATRE: Let me make a suggestion for all these  
23 clarification questions. If they can wait, please wait so that  
24 you won't interrupt the person who's asking questions, their chain  
25 of thought. If it is not critical, you can make a list and then

1 you can clarify it when your turn comes again.

2 MR. FASSETT: I agreed. He clearly paused. He's still  
3 looking.

4 MR. CHHATRE: You still disturb the chain of thought,  
5 Mr. Fassett.

6 MR. FASSETT: I agree.

7 MR. CHHATRE: So please cooperate.

8 MR. FASSETT: I agree.

9 BY MR. SHORI:

10 Q. Do you recall hearing any discussion after those steps  
11 too place essentially to turn POS 7A, 7B and line 131 at Sheridan  
12 Road? Did you hear anyone indicate pressures coming down or  
13 pressures decreasing? Anyone else in the room?

14 A. I don't recall.

15 Q. Now earlier Mr. Fassett said you weren't the -- was it -  
16 - I forget the acronym.

17 A. Operator?

18 Q. Operator for that --

19 MR. FASSETT: GSO.

20 THE WITNESS: GSO? Yeah.

21 BY MR. SHORI:

22 Q. Who would have been the GSO for that? Basically, are we  
23 referring again just to whoever would have carried out that order  
24 and is that the GSO?

25 A. I already answered that question with I don't know.

1 Q. Okay.

2 MR. SHORI: That's it for me for now. Thank you.

3 MR. KATCHMAR: Just for the record, GSO was used a  
4 second ago, and that means gas service operator or gas system  
5 operator. Peter Katchmar with DOT, PHMSA.

6 BY MR. KATCHMAR:

7 Q. Does PG&E have specific procedures on how to operate the  
8 system when a clearance that affects the SCADA system is  
9 scheduled?

10 A. Does PG&E, it's -- the company have a -- say it again,  
11 please?

12 Q. Are there procedures --

13 A. Okay.

14 Q. -- specific procedures on how to operate the pipelines  
15 when a clearance that affects the SCADA system is scheduled,  
16 encountered?

17 A. Well, there are different types of clearances, and all  
18 clearances have steps that the folks -- the maintenance folks in  
19 the field and that need to follow and as far as our end of  
20 operational part of it, we follow along with them along the  
21 clearance and there are times where we need to make operational  
22 moves, sometimes before the clearance starts so they can do the  
23 clearance to lower, let's say, the pressure in a pipe so they can  
24 do some welding.

25 Q. Sure.

1           A.    So there's so many variants in clearances and there are  
2 so many different types.

3           Q.    Okay.  I'll try to clarify.  When there's a clearance  
4 such as what's going on at Milpitas on September 9th, 2010 that  
5 affects the actual readings that the SCADA system is going to get  
6 for some period of time --

7           A.    Uh-huh.

8           Q.    -- like between, you know, 9:00 a.m. and 9:00 p.m.,  
9 let's say, the clearance is for all this work to be done.  Is  
10 there -- are there procedures that you -- that tell you not to  
11 rely on pressures and flows or whatever the SCADA is normally  
12 showing you?

13          A.    On this particular clearance, it -- it's a communication  
14 clearance.  It's a power supply clearance, which is different, I  
15 mean, it's a one of a kind type of clearance.

16          Q.    Okay.  That's why I'm asking.  Is there --

17          A.    Yeah.

18          Q.    -- are there procedures --

19          A.    Uh-huh.

20          Q.    -- for this specific type of clearance that tell you  
21 what to do when you cannot rely on the SCADA?

22                MR. KATCHMAR:  Off the record?

23                MR. CHHATRE:  Off the record.

24                (Off the record.)

25                BY MR. KATCHMAR:

1 Q. Okay, can you define what the clearance -- how PG&E  
2 defines what the clearance is, please?

3 A. The clearance is the procedure, which has guidelines and  
4 steps, a number of steps that are followed along throughout the  
5 process.

6 Q. Okay, great. So I guess my question didn't make a whole  
7 lot of sense to you because of the definition of terms. What I'm  
8 trying to get at is if you knew, and it's in the procedure or in  
9 the clearance, about the communications being non-, you know, not  
10 live or whatever, I guess the question is why were you even  
11 getting any signals at all from Milpitas if you couldn't rely on  
12 them during the clearance?

13 A. Well, we did not take that station off line. We did not  
14 insert false pressures or reads, and it wasn't something we were  
15 concerned about because the station was being manned by PG&E  
16 personnel maintenance that were operating the clearance.

17 Q. Okay. Has PG&E modified their procedures after this  
18 event to mute, if you will, any communications from any work being  
19 done at a station that would preempt the SCADA from giving you  
20 good data?

21 A. Not that I'm aware of.

22 Q. Okay.

23 MR. SHORI: Off the record.

24 MR. CHHATRE: Off the record, please.

25 (Off the record.)

1 BY MR. KATCHMAR:

2 Q. Okay. Thank you for your answers, Michael. I suppose  
3 that I -- I'm asking you questions that you really can't -- you  
4 can't answer, and I apologize for that, but I think I have -- you  
5 have given us enough information that I do know who I should ask  
6 these questions of. So, thank you very much, I'm done.

7 A. Okay. Thank you.

8 MR. GUNTHER: No more questions.

9 MS. MANZATTI: No questions.

10 MR. SPERRY: No questions.

11 MR. NICHOLSON: I've got a few questions for you,  
12 Michael.

13 MR. FASSETT: That's Matt Nicholson talking.

14 MR. NICHOLSON: Matt Nicholson, NTSB.

15 BY MR. NICHOLSON:

16 Q. Have there been any procedure changes in the control  
17 room as a result of the September 9th failure?

18 A. We've added some remote operational capabilities to  
19 various stations along the peninsula.

20 Q. Which stations?

21 A. I believe Healy station and I can't recall the other  
22 station, San Andreas crosstie, I believe.

23 Q. Okay.

24 A. But I can't recall for sure.

25 Q. But you said you added remote IO? What --



1           A.    Where we can remotely, from the operation room, open and  
2 close valves --

3           Q.    Okay.

4           A.    -- now, which we didn't have before.

5           Q.    Okay.  That's -- what about procedural changes?  To me  
6 that's more of a hardware change or a SCADA change.  Are there any  
7 procedure changes, how you respond to abnormal conditions, maybe?

8           A.    No.  No, that hasn't changed.

9           Q.    Have there been any changes to SCADA alarms or limits  
10 since -- as a result of the September 9th rupture?

11          A.    No.

12          Q.    Have there been any personnel changes in the control  
13 center as a result of the September 9th --

14          A.    No.

15          Q.    Have the responsibilities or roles been revised or  
16 changed in the control center as a result of September 9th?

17          A.    No.

18          Q.    So work stations are still configured as they were on  
19 September 9th?

20          A.    That's correct.

21          Q.    The -- it sounds like so the work -- you said you  
22 disregarded some of these alarms that were coming in because of  
23 the work at Milpitas.  And I'm just curious, how do you know which  
24 tag names in SCADA are going to be associated with the work at  
25 Milpitas?  How do you know what to disregard?

1           A.    That was actually a station clearance.  That whole  
2 station was out of communication for --

3           Q.    Okay, so graphically anything associated -- any  
4 transducer associated with that station?

5           A.    Pressures, flows, valve indicators.

6           Q.    Okay.  So, any changes upstream or downstream would be  
7 from a different station?

8           A.    That's correct.

9           Q.    Okay, and those would not be disregarded because of an  
10 alarm?

11          A.    That's correct.

12          Q.    So it sounds like the clearance was the procedure that  
13 we were looking for.  Do we have a copy of that clearance that was  
14 used for Milpitas?  Does NTSB?  I'm looking.

15               MR. JAQUES:  I don't think he would know, but you do  
16 have it.

17               MR. NICHOLSON:  Okay.

18               BY MR. NICHOLSON:

19          Q.    And I know Bob tried to cover this and I might have  
20 gotten lost in the conversation, but when they were doing this  
21 work at Milpitas on the UPS, it sounds like they were interfering  
22 with the readings at the station because of the loss of power.  
23 Did they take it into manual or local control at the station?

24          A.    I believe it was in local control, yeah, or -- which is  
25 -- does not allow us to have remote capabilities to make

1 operational moves.

2 Q. And how was that displayed to you? How do you know  
3 whether it's in manual?

4 A. It'll normally read "local" on the CITEC screen at that  
5 station. It'll say "In local control."

6 Q. On each of the instruments or just one place it says  
7 local?

8 A. At that particular station -- they're -- all the  
9 stations are a little different.

10 Q. Okay.

11 A. At that particular station, I don't recall.

12 Q. So when you saw zero pressure readings, the controllers  
13 aren't controlling to that zero pressure? Or can they make set  
14 point changes locally? How does that work?

15 A. When it's in local?

16 Q. Yeah.

17 A. Can they make set point changes?

18 Q. Yeah. Or is the system still -- is it going to respond  
19 to the zero pressure it sees? Is the valve going to swing open?  
20 How do the valves work when you're getting erratic pressure  
21 readings at the station?

22 MR. JAQUES: You know, I think this is beyond this  
23 witness's knowledge. He's a gas control operator; he's not  
24 involved with the equipment itself.

25 MR. FASSETT: Off the record.

1 MR. CHHATRE: Off the record, please.

2 (Off the record.)

3 MR. NICHOLSON: Thank you. That's all I have.

4 MR. CHHATRE: Ravin Chhatre, NTSB.

5 BY MR. CHHATRE:

6 Q. From San Francisco, can you see or control the lines  
7 coming in to Milpitas?

8 A. Yes.

9 Q. And do you know how many lines are coming in?

10 A. I believe there are four lines coming in.

11 Q. And what kind of monitoring you can do from San  
12 Francisco on those lines coming in to Milpitas?

13 A. Pressures and flows, valve indicators.

14 Q. And that's as they come into the station? Is it  
15 Milpitas terminal or Milpitas station? What is the correct term  
16 for this?

17 A. Both will work.

18 Q. Both are correct? Okay.

19 A. Yeah.

20 Q. So what are the pressure coming in to different lines?  
21 Do you remember? I mean, can you see those?

22 A. Yeah, we can see the pressures.

23 Q. You can see those?

24 A. Yeah.

25 Q. Do you recall any of those lines reached 600 psi?

1 A. I don't recall that, no.

2 Q. I think there was a statement made in the earlier  
3 testimony that pressure read was 600 psi and obviously they're  
4 erroneous, or something to that effect?

5 A. Uh-huh.

6 Q. Why would feel they're erroneous?

7 A. Because of the clearance that was active, and I don't  
8 know if that pressure, that 600 you're talking about, was incoming  
9 or outgoing because I think you were just referring to incoming.

10 Q. Correct.

11 A. Right, yeah.

12 Q. Now --

13 A. I don't recall seeing that pressure.

14 Q. Now, are the -- line 132, I guess all the lines are  
15 coming from the common header. What part of that header you are  
16 monitoring in San Francisco?

17 A. There's more than one header at the Milpitas station.

18 Q. Okay.

19 A. They go into what we'll call the mixer, the Milpitas  
20 mixer, and then the outgoing lines leave the mixer.

21 Q. And is the mixer connect on where all the three lines  
22 leave Milpitas terminal?

23 A. There's four lines that leave the mixer.

24 Q. Okay.

25 A. Yeah.

1 Q. And I guess each line, if I recall correctly, that has a  
2 control valve and a regulating valve, one is pneumatic and one is  
3 electronic.

4 A. There's a regulator and a monitor.

5 Q. Okay. A monitoring, electronic, regulating and  
6 pneumatic; is that correct?

7 A. I don't know for sure.

8 Q. Okay.

9 A. Yeah.

10 Q. So are you monitoring both of those from -- in normal  
11 operation, not that day.

12 A. The monitor itself is just normally set 10 pounds above  
13 MOP so it's always in the open position so all we have there is  
14 the valve indicator showing us that it -- the color's red means it  
15 -- that it's open.

16 Q. It's open. So --

17 A. And then the regulator valve which is in front of the  
18 monitor is going to have a pressure flow. It's also going to have  
19 a valve indicator color. Green is closed, yellow means it's in a  
20 throttle or mid-position and red is wide open.

21 Q. Okay. And is that generally in yellow position?

22 A. Yes, it's something we can see.

23 Q. Okay.

24 A. Yeah.

25 Q. So say this normally, normal operation it needs to be at

1 throttle so it can control the pressure at 375 or whatever the  
2 setting may be?

3 A. Whatever the set point is, yeah.

4 Q. So is it correct to assume that normal color would be  
5 yellow for that --

6 A. I'm sorry, repeat that, please?

7 Q. Is it correct to assume, then, the normal operating  
8 condition the color would be yellow all the time for that?

9 A. No, it's -- it varies constantly.

10 Q. It varies constantly. So at times it can be completely  
11 open, being, I guess it is red?

12 A. Yeah. It just depends what line we're talking about.

13 Q. I'm talking about 132.

14 A. About 132 itself? Yeah, it just depends on the set  
15 point. It just depends on the set point of whether it's going to  
16 remain open or --

17 Q. Well --

18 A. -- or throttle -- in a throttle position or --

19 Q. I thought somewhere in your earlier testimony, if you  
20 want we can go and actually look at the page number, but you said  
21 it was set at 375?

22 A. I don't remember.

23 Q. Okay. Typically do you guys set -- I guess, do you guys  
24 decide what the set point will be on those valves at San Francisco  
25 or --

1           A.    In San Francisco, yes.  But, I mean, ultimately the --  
2 we can control the set points, but there's guidelines and  
3 restrictions that are given to us by the engineers on where we can  
4 operate a line pressure.

5           Q.    Okay.  And that's determining factor for you to put the  
6 set point?

7           A.    That's correct.

8           Q.    The pneumatic valve, what did they tell me you use that  
9 for?  What is --

10          A.    The regulator?

11          Q.    Regulator.

12          A.    Or a trimmer valve?

13          Q.    No, trimmer is a regulating.

14          A.    Yeah.

15          Q.    And pneumatic is control; is it not?

16          A.    I don't know.

17          Q.    Okay.

18          A.    Yeah.

19          Q.    The -- can you --

20                (Off the record.)

21                BY MR. CHHATRE:

22          Q.    Now, the monitor, can you see the setting on the monitor  
23 on San Francisco?

24          A.    No.

25          Q.    You cannot?



1 A. No.

2 Q. So would you know if monitoring valve is open, closed,  
3 you would not know that in San Francisco?

4 A. We can by the valve indicator, the color of the valve on  
5 the screen.

6 Q. And that also changes all the time, or is it pretty much  
7 at a standard color?

8 A. It's pretty much a standard color.

9 Q. And what is that color?

10 A. Red.

11 Q. That means it's wide open?

12 A. Yes.

13 Q. All the time?

14 A. Yes.

15 Q. And I hope you -- if you don't recall I'll show you the  
16 page here, but the question was when you are watching the screen  
17 on other occasions on other lines, do you see the pressures  
18 changes and the answer was "We get a lot of false reads. It's all  
19 done through communication. So the system is pulling the top of  
20 it to send the signal to keep us updated on pressures and flows  
21 throughout the system. A lot of times you will see it spike and  
22 go right back to normal. It's called, it's error glitch is what  
23 we call it."

24 A. That's correct.

25 Q. Has this issue been ever addressed by the control center

1 in San Francisco as is this something that needs to be fixed?

2 A. A SCADA glitch? Where you see a false flow for a brief  
3 second? No. I mean, we're -- the supervisory data and control --  
4 or control and data acquisition, SCADA, system that we use, it  
5 used to be a -- an older program that we used was -- which was  
6 called Adax (ph.) and a few years ago we switched to a new program  
7 called CITEC which is a Windows program. And it is new, and there  
8 are bugs, but there's corrections being made all the time.

9 As far as just a SCADA glitch where you get a false read  
10 for a brief second, we still see that and whether they're working  
11 on fixing something like that I don't know.

12 Q. Now has that --

13 A. I --

14 Q. -- ever been brought to people above you by the, I  
15 guess, worker bees who see these glitches?

16 A. Well --

17 Q. Were the upper management ever informed of that?

18 A. I think a lot of these reads are coming off microwaves  
19 and satellite towers and I, you know, a lot of times storm --  
20 electrical outages can cause interference.

21 Q. Oh, so it has been discussed --

22 A. Weather --

23 Q. -- and that's where you came to conclusion to that's  
24 what's causing it?

25 A. No, I don't know for sure what actually causes it, but I

1 can tell you when there are storms, we have more communication  
2 issues of concern on monitoring the system.

3 Q. And have you ever passed that on above you, saying look,  
4 this is happening, this is something you need to look at or you  
5 just kind of learned to live with it?

6 A. There's a lot of things that we would not like to have  
7 to learn to live with. Yeah. The -- our CITEC group, we have a  
8 CITEC department that is constantly working to improve our system,  
9 our SCADA system.

10 Q. And I guess my question is has you, particularly, or if  
11 you know anybody else in your group, has told them that this is  
12 what's happening?

13 A. Oh, yeah, they're aware of it, sure.

14 Q. Yeah.

15 A. Yeah.

16 Q. And then have they communicated back to you saying we  
17 are looking into it or, ah, it's not a big deal?

18 A. No, they're very cooperative. They always look into  
19 everything we ask of them.

20 Q. And so what is their response to when you brought this  
21 thing up to them?

22 A. You're referring back to just a SCADA glitch?

23 Q. Yeah.

24 A. Like a --

25 Q. The glitches that you must mentioned.

1 A. -- a false read?

2 Q. Yeah.

3 A. That I might see for a second?

4 Q. And you said, you know, you guys kind of discussed with  
5 them and they kind of cooperate with you. My question is have  
6 they responded back to you guys on this particular issue?

7 A. As far as I know that's always been an issue of concern  
8 and they're always looking for ways to improve it --

9 Q. But --

10 A. -- and, I mean, I -- every time I get a little SCADA  
11 glitch, a spike for a brief second, I do not tell them hey, I just  
12 got this, because this is something that happens, you know, all  
13 the time. But it, again, they're brief, for a second or two.

14 Q. And when this new system came into effect, this -- you  
15 had an older system --

16 A. The -- yeah.

17 Q. -- then you switched to a newer one?

18 A. The CITEC system? We have -- I would say probably  
19 around three years, four years.

20 MR. CHHATRE: Off the record, please.

21 (Off the record.)

22 BY MR. CHHATRE:

23 Q. Say that again, please?

24 A. CITEC is the Windows program SCADA system that we're  
25 using now. CITEC is spelled C-I-T-E-C.

1 Q. Okay. And when was that, -- it started three to four  
2 years ago, meaning that --

3 A. I believe it's been about three or four years now we've  
4 been using that one.

5 Q. Okay. And have you been working on that system from day  
6 one?

7 A. Me personally? No. I worked on the -- when I joined  
8 the department nine years ago, it was -- I was working with the  
9 Adax system.

10 Q. Okay. But I mean, when the system CITEC became  
11 effective --

12 A. Uh-huh.

13 Q. -- you have been using that --

14 A. Yes.

15 Q. -- for the last four years?

16 A. Yes.

17 Q. So you are familiar with the system? Yes?

18 A. Still learning. It's -- yeah.

19 Q. Still learning? Okay.

20 A. I mean, it's -- yeah.

21 Q. And are these glitches that you just mentioned, did they  
22 act up from day one or they started all coming at a later time?

23 A. They've been going on as long as I've been an operator  
24 in the department.

25 Q. If you have any -- do you have any program that says,

1 you know, if you have any suggestions for improvement or, I guess,  
2 compliments, complaints --

3 A. Uh-huh.

4 Q. -- follow this form or let somebody know in the system?

5 A. Yeah. We have a work request that we would fill out and  
6 submit to the CITEC group for improvements or issues of concern  
7 that need to be addressed.

8 Q. And the CITEC group is within PG&E?

9 A. Yes.

10 Q. Okay. And have you made any complaint or suggestion to  
11 that group about these glitches that you guys are seeing for last  
12 four years?

13 A. I have submitted work requests to them. As far as just  
14 seeing glitches, no.

15 Q. Okay. Shifting gears a little bit, line 101, 109, and  
16 132 that you guys monitor in San Francisco, does your display  
17 system or some sort of a signals tell you which lines are  
18 crosstied?

19 A. They're -- on our maps? On our peninsula maps? You  
20 referring down the peninsula on what we can see on CITEC? Yeah.  
21 There -- some of the -- there are some stations that show  
22 crossties.

23 Q. And all the crossties are in the stations, and nothing  
24 between the stations?

25 A. I'm trying to recall. Yeah, I don't know for sure.

1 Q. Okay.

2 A. Yeah.

3 Q. So let me ask it different. If there are crossties,  
4 could you see those on your SCADA system in San Francisco? That  
5 101 and 109 are crosstied at milepost such and such and is the  
6 valve, is it open or closed?

7 A. We can now.

8 Q. And could you do that at the time of the accident?

9 A. No.

10 Q. So is that a change since the accident?

11 A. We've added some screens and some remote monitoring  
12 since the accident along the peninsula.

13 Q. Okay. So at the time of the accident you couldn't tell  
14 on your SCADA if 101, 109 or 132 are crosstied and the valves are  
15 open or closed on the SCADA at the time of the accident?

16 A. No. No. We were pulling maps and diagrams at that time  
17 looking at stations that we don't have on CITEC or at the time we  
18 didn't have on CITEC and --

19 Q. Because the way I see the response we got earlier was  
20 those three lines are different MAOP?

21 A. Uh-huh.

22 Q. Now is this something you guys monitor, MAOP on the San  
23 Francisco?

24 A. Yes.

25 Q. Do you recall what the -- I don't have it here. Do you

1 recall what the MAOP for 101, 131 -- 132 was? Oh, wait a minute.  
2 I have it here. It says 101 and 132 is 400 pounds and 375 is 109;  
3 does that sound correct?

4 A. That sounds correct.

5 Q. Now, if you do not know if the lines are crosstied and  
6 the valves at the crossties open or closed, how can you assure the  
7 integrity of these different lines with different MAOP?

8 A. Well, at the very stations that we do have capabilities  
9 of looking at on CITEC, we can see the pressures at various  
10 stations along down the peninsula from Milpitas all the way to San  
11 Francisco.

12 Q. So if there's a pressure surge or pressure drop in any  
13 one of those lines and if other line is cross-feeding it, how long  
14 it will take you to see something on your SCADA?

15 A. Well, we should see it right away, but it depends on  
16 where -- the cause for the pressure drop and the mile point of the  
17 pressure drop. And then -- and which -- if it's downstream or  
18 upstream of a station and then how fast the pressure's dropping,  
19 like two pounds an hour, 10 pounds an hour, 100 pounds an hour.  
20 Just depends. We -- that'll determine on where we see it and how  
21 soon we're going to see it. And usually it'll go into a low alarm  
22 first and then low low after that.

23 Q. Is -- what I'm trying to understand is if there is a  
24 crosstied between stations, and I do not know whether we had that  
25 or not, we'll -- we're to get that information pretty soon.



1 A. Uh-huh.

2 Q. If line 132 ruptures and it is being fed by 101 and 109  
3 at a location which is away from any one of those stations that  
4 you monitor, that you can control, how long -- how quickly can you  
5 see the sudden pressure drop versus low pressure drop from the  
6 ruptured line if it is being cross-fed by other lines?

7 A. It depends if that crosstie is open or not --

8 Q. Right.

9 A. -- and we have capabilities of --

10 Q. So you --

11 A. -- of seeing it, yeah.

12 Q. So you may or may not see; is that correct summation?

13 A. That's correct, yes.

14 Q. Okay. Then just, again, on the same chain of thought,  
15 into the pressure spike and if it is being crosstied, is it the  
16 correct summation, then, that even the pressure spike will take  
17 time for you to see it?

18 A. On a pressure spike, well, it depends, again, on --

19 Q. Right, I mean, what I'm --

20 A. Yeah.

21 Q. Okay.

22 A. On -- there's just so -- it's a very hard question.

23 Q. I understand. No, I understand. But from the years of  
24 SCADA operator, I guess, I'm -- what I'm trying to find out is  
25 then is it reasonable -- since you do not have at that time of the

1 accident and now you do --

2 A. Uh-huh.

3 Q. -- at the time of the accident, since you have no way  
4 of --

5 A. Well, see, most crossties are normally closed and open  
6 for maintenance or -- and the reason why is because of the  
7 different MOPs on the different lines.

8 Q. Right.

9 A. You know, if you have 375 on one line and 400 on another  
10 line and you're operating at, let's say, 385 on the 400, you can't  
11 open up that crosstie --

12 Q. Correct.

13 A. -- and send -- go 10 pounds over.

14 Q. But I thought, from the information we have so far, I  
15 thought all those lines that 375 MOP.

16 A. I believe that was correct at the time, yes.

17 Q. So --

18 A. Yeah.

19 Q. -- then why would that prevent from the crosstie being  
20 open? I mean, I guess --

21 A. We couldn't see the crossties at the time.

22 Q. Okay. All right.

23 A. Yeah.

24 Q. Okay, that is fine. Just reviewing some of the  
25 clarification questions and the questions that were asked earlier.

1 From your SCADA system, can you tell us when the -- actually the  
2 work at Milpitas started? Or you could not tell that from --

3 A. You know, I couldn't. One of my co-operators was -- had  
4 the clearance on his desk and he was in more of a constant  
5 communication with the field personnel in Milpitas.

6 Q. And --

7 A. I wasn't really following that clearance along. I had  
8 the Milpitas screen up on one of my monitors because I knew there  
9 was an active clearance, but I wasn't in communication with the  
10 field person.

11 Q. And who that person would be?

12 A. I believe that was Barry Mitchell.

13 Q. I'll have to look at my list. But if there is a  
14 clearance at any of the station, they tell you that that's -- we  
15 are going to do some work or whatever, could you, on the SCADA  
16 displays, see when the work started or you would not -- it could  
17 be telephone communication of some sort for you to tell?

18 A. Well normally when we get a -- receive a phone call from  
19 the group in the field that is requesting to start a clearance,  
20 we'll have that clearance on one of our desks, whoever got the  
21 call, and they'll type it on the gas logging system that this,  
22 hey, clearance is at this location, is starting at this time. And  
23 so it's up to all three of us operators to constantly follow along  
24 with what we're seeing, anything is being typed up. And we do  
25 communicate with each other too. We're all sitting next to each

1 other in the room.

2 Q. Yeah. And you were seeing --

3 A. So I knew there was a clearance going on.

4 Q. Okay. But I guess the clearance will be giving you a  
5 window of operation or whatever they are doing. It -- will they  
6 not?

7 A. Yeah, every clearance does have a timeline on it, and  
8 they vary. Some clearances take 15 minutes.

9 Q. Right.

10 A. Some clearances take a week.

11 Q. But -- my question really is on September 9th event --

12 A. Uh-huh?

13 Q. -- you have a clearance on that day for some work being  
14 done at Milpitas?

15 A. Right.

16 Q. You meaning San Francisco.

17 A. Right. I understand.

18 Q. Now, they will -- and I -- what I'm trying to understand  
19 is will Milpitas give you a window of time that that's when they  
20 are going to do or they give you a fixed time that we are going to  
21 start the work at 4:55 p.m.?

22 A. On a system standard clearance they do not need to call  
23 for a preliminary like they would on a new clearance. A  
24 preliminary they normally need to call 48 hours in advance and  
25 then they would call for a final right before they activate that

1 clearance.

2 Q. Okay.

3 A. On a system standard clearance like the Milpitas UPS  
4 clearance that was active at the time, they could call in and say  
5 we're starting this clearance.

6 Q. Okay, but there is no way for the SCADA people in San  
7 Francisco to know when they started it?

8 A. Oh, no, they would --

9 Q. On the screen or --

10 A. Well, they would call it in and --

11 Q. Okay, so you --

12 A. And they would call it in. I think Barry took the call.  
13 He pulled the clearance. He had a copy on his -- of the clearance  
14 on his desk and he would type on the GLS that the -- this group is  
15 starting this clearance --

16 Q. Oh, I understand. Okay.

17 A. -- and so he would follow along with them in the field  
18 and by typing it on the GLS we see it also, okay, hey, there's a  
19 Milpitas clearance starting. Okay, Barry's got the clearance over  
20 there and --

21 Q. But unless they call, you really wouldn't know from the  
22 displays or anything like that some --

23 A. No, they -- nobody can start a clearance without  
24 communicating it through us.

25 Q. Okay. So even if everything is arranged prior to doing

1 anything --

2 A. That's correct.

3 Q. Okay. They still have to call you in?

4 A. Absolutely.

5 Q. Okay.

6 A. Absolutely.

7 Q. And my -- I guess my --

8 A. Yeah.

9 Q. -- maybe it's not clear to me. What I'm trying to find

10 out is if for some reason nobody calls you --

11 A. Uh-huh?

12 Q. -- we are all humans --

13 A. Uh-huh?

14 Q. -- would you be able to see that on the screen, to see

15 nobody called me, but I see something?

16 A. Right, right, sure. Well, it depends on the type of

17 clearance, if it's going to affect SCADA or not and --

18 Q. Again, going back to that September 9, 132. I just want

19 to keep only focused on that one. Would -- on that clearance,

20 something like that, with your experience, could you see the work

21 has started --

22 A. Oh, yeah. Yeah.

23 Q. -- if nobody calls you?

24 A. Oh, we would know something was going on --

25 Q. Something.

1           A.    -- with the communication just disappearing off that  
2 screen and the pressures and flows being erratic, we would know  
3 that, okay, is there a clearance going on somebody didn't call us,  
4 yeah.

5           Q.    So you're not blind (indiscernible).

6           A.    Right.  We're not blind.

7           Q.    You're not blind.  Okay.

8           A.    Yeah.

9           Q.    And I know you don't -- you didn't have the Milpitas  
10 clearance even though the -- you -- the screen was on.  Do you  
11 remember any conversation with Barry Mitchell or -- from your  
12 screen when the work started at Milpitas?

13          A.    I don't remember the time line on it.  I just  
14 remember --

15          Q.    That's fine.

16          A.    -- that that clearance was starting and --

17          Q.    If you do not know --

18          A.    -- and for good measure, I just pulled it up on one of  
19 my monitors --

20          Q.    Okay.

21          A.    -- just so I know there's something active going on  
22 there.

23          Q.    Okay.  If you do not know you do not know.  Can you  
24 just, for the record, can you tell me what a preliminary clearance  
25 is -- nuclear incident system standard clearance is?  I'm not -- I

1 don't think I understand that.

2 Q. A system standard clearance is a clearance that could be  
3 done on a weekly basis, a monthly basis, an annual basis, and  
4 there -- it could be just greasing valves, a weekly grease --  
5 greasing of the valves. That would be an example of a standard  
6 clearance. A new system clearance would be a brand new clearance  
7 which they would have to get a preliminary for in advance and then  
8 request a final the day of the clearance before they start. And  
9 that could be installing new pipes --

10 Q. Sure.

11 A. -- or new, you know, new gas lines.

12 Q. And what is a preliminary clearance? What is that?

13 A. No, a preliminary is just when they're calling for a  
14 prelim to get an okay to give us a heads up that -- that's just  
15 our standard format of our process. They would have to call and  
16 get an okay saying hey, we're going to be starting this clearance  
17 tomorrow or in two days. We're requesting a preliminary okay for  
18 it now. Because it might take us a day to get the conditions  
19 ready for them to do their work.

20 Q. Sure.

21 A. We might have to lower the pressure in a pipeline for  
22 them to do their work and --

23 Q. And so on September 9, I guess, replacement of UPS or  
24 whatever it was they were doing on UPS, would that be considered a  
25 new clearance or would that be considered a system clearance?



1           A.    I believe that clearance is a system standard clearance.  
2    So it's not a new clearance.  It's work that they've done before  
3    and will do again.  It's a --

4           Q.    Right.

5           A.    -- whether it's a every six months or once a year I'm  
6    not sure.

7           Q.    Okay.  So that means whatever work they were doing on  
8    UPS was kind of a repetitive or periodic work?  Like greasing the  
9    valves and stuff like that?

10          A.    Uh-huh.  Yes.

11          Q.    Okay.  Thank you so much.  Really appreciate your time.

12          A.    You're welcome.  Thank you.

13                MR. CHHATRE:  Any questions?

14                MR. NARVELL:  I have some now.  (Indiscernible) wait  
15    until the end.

16                MR. CHHATRE:  Yes, no, let's do it right now.

17                MR. NARVELL:  Okay.

18                BY MR. NARVELL:

19           Q.    Just to -- for clarification for the transcripts, there  
20    were some acronyms --

21                MR. CHHATRE:  Rick Narvell, NTSB.

22                MR. NARVELL:  Rick -- I'm sorry, Rick Narvell from NTSB.

23                BY MR. NARVELL:

24           Q.    Mike, you just had a few acronyms, just to kind of  
25    clarify what they mean, IO?  What's that?

- 1 A. Did I say IO?
- 2 Q. I don't believe you did, but it came up.
- 3 MR. GUNTHER: No, Matt said IO.
- 4 MR. NARVELL: Oh, yeah, Matt said IO, excuse me.
- 5 BY MR. NARVELL:
- 6 Q. What does -- do you know what IO is?
- 7 A. No, I don't.
- 8 Q. Okay. We'll get that. UPS?
- 9 A. UPF -- UPS I believe means uninterrupted power supply.
- 10 Q. Okay. And MOP?
- 11 A. Maximum operating pressure.
- 12 Q. Okay.
- 13 MR. NARVELL: I believe IO, for the record, is
- 14 input/output.
- 15 MR. KATCHMAR: Input/output.
- 16 MR. NARVELL: Okay, great. Thank you.
- 17 MR. GUNTHER: Yeah.
- 18 MR. NARVELL: That's all I have.
- 19 MR. CHHATRE: Follow-up questions?
- 20 MR. FASSETT: None.
- 21 MR. CHHATRE: Sunil?
- 22 MR. SHORI: Yes. Sunil Shori, CPC. Just two follow-up
- 23 questions.
- 24 BY MR. SHORI:
- 25 Q. The clearances that you folks receive at gas control --

1 gas operation, how long do you keep those?

2 A. Which clearances in reference are we referring to?

3 Q. Clearance -- just --

4 A. Like --

5 Q. Work clearances. Yeah, work clearances for --

6 A. A system standard clearance?

7 Q. Yeah.

8 A. Forever.

9 Q. Second question was on the crosstie valves that we were  
10 talking about earlier; I understand you've got new automated  
11 valves at various crosstied stations that are remotely controlled,  
12 but the manual valves that have been there, how do you track their  
13 position as far as on your screens? Do you see those valves on  
14 your schematic layout with when you're looking at the screen and  
15 do they indicate to you what position those valves are in? I  
16 realize they're not remotely controlled or automated, but in terms  
17 of being able to see what valve's there and what position it's in  
18 at any given time, can you see that when you look at the screen  
19 electronically?

20 A. Yeah. If it's on CITEC, if it's on our screen, we can  
21 tell which -- if a valve is open or closed and if there are valves  
22 on the screen that we're not sure of because red is open, yellow's  
23 throttle, green is closed, there are some block valves that are a  
24 gray color. We could always look at our maps and diagrams,  
25 papered maps and diagrams that would show what those positions may

1 be -- of those valves may be.

2 Q. But I mean in general, you --

3 A. In general --

4 Q. -- any time somebody's going to be opening a valve,  
5 closing the valve --

6 A. Uh-huh.

7 Q. -- and I can't imagine leaving it partially open, but  
8 you figure a crosstie is either going to be open or closed.

9 A. That's correct.

10 Q. But, so in general you're going to have it -- you --  
11 they're -- when that operation takes place, they should be letting  
12 you know what position they're leaving it in?

13 A. That's correct.

14 Q. Okay.

15 A. And it would show.

16 Q. And so there really shouldn't be any question when  
17 you're looking at your screen in terms of what is that valve?

18 A. That's correct. It would show open or closed.

19 Q. Now, there's a couple of reading points from Milpitas  
20 that are indicated as being SCADA pressure reads unaffected by  
21 clearance work. We see them in two different locations; mile  
22 point -- it's -- it seems to be mile point zero and then there's  
23 also a couple more at mile point 9.89, 10.32 and others which  
24 according to what we were provided, again, indicates SCADA  
25 pressure reads unaffected by the clearance work. And this is

1 referring to the clearance work going on at Milpitas at the time  
2 of the incident and these are showing -- these are the same ones  
3 that I talked to you about earlier in terms of 393 pounds starting  
4 at 17:53 to 18:02 hours. Would you have -- would -- did you have  
5 the ability to see those particular read points?

6 A. I'm not sure where the --

7 Q. And if you need to see the description, and again, I'm  
8 not sure how the sensing point is being referenced. It's MMT --  
9 see if this makes any sense to you in terms of numbers, MMTPT0031?

10 A. No. I have no idea where that is and I can't -- I don't  
11 know those mile points.

12 Q. Let me ask -- let me just show you the header.

13 MR. NICHOLSON: This is Matt Nicholson, NTSB. Sunil,  
14 can you refer to the request number when we --

15 MR. SHORI: Yeah, it's NTSB 001-013-S1-amended.

16 MR. NICHOLSON: Thank you.

17 THE WITNESS: Well, I believe the mile point zero is  
18 going to be actually at the station itself, and then this would be  
19 almost 10 miles downstream of the station.

20 BY MR. SHORI:

21 Q. Uh-huh.

22 A. But I don't know particularly if we, you know, what we  
23 may see there if we have reads or if these are actual stations. I  
24 don't know for sure.

25 Q. All right. But again, these are mile point zero, so

1 again, assuming these are all in the station --

2 A. Uh-huh.

3 Q. -- do you know why you can't -- you don't see those or  
4 why you wouldn't have been seeing those?

5 A. Again, this is -- there's a clearance -- even if I saw  
6 these pressures, even if these pressures were 400 or zero, or 50,  
7 they -- these were not pressures that were -- that we could rely  
8 on.

9 Q. Right, but the heading here is SCADA pressure reads  
10 unaffected by clearance work. So I take that to mean that, in  
11 essence, the clearance -- whatever was -- been going on with the  
12 clearance didn't affect those numbers or didn't affect those  
13 readings whereas --

14 A. Uh-huh.

15 Q. -- the header over here is SCADA pressure reads affected  
16 by clearance work. So these are maybe not reliable, but according  
17 to these -- this header and this header, the values under these  
18 seem to be unaffected by the clearance work.

19 A. Unaffected.

20 MR. JAQUES: Is there a question there?

21 THE WITNESS: Yeah.

22 MR. SHORI: Yeah.

23 BY MR. SHORI:

24 Q. The question is did he -- is there -- would he have been  
25 able to see these reads or these monitoring points on his screen?

1           A.    I believe we do -- we can see these at these M38, M31,  
2 M32, yes. We can see those, but whether they were something we  
3 could rely on or not I can't answer that. I don't know.

4           Q.    Okay, but you could see those?

5                   MR. CHHATRE: Off the record, please.

6                   (Off the record.)

7                   MR. SHORI: I would just like to get it on the record in  
8 terms of what Mr. Valenti said that M38, M31 and M32 are available  
9 to him to be able to pull it up as a visual if he pulls it up so  
10 that that data is available to him and he indicated agreement with  
11 that, so I -- that's on the record. That's all I wanted.

12                   MR. CHHATRE: Ravi Chhatre, NTSB.

13                   BY MR. CHHATRE:

14           Q.    Do you agree with that statement?

15           A.    I agree with that statement.

16           Q.    Now, does that mean even though you may not be seeing it  
17 it is being recorded someplace?

18           A.    What's being recorded?

19           Q.    The --

20                   MR. SHORI: I think my basis was is there sensing points  
21 that are picking those numbers up that are being probably being  
22 used for various purposes but they're also available through the  
23 same SCADA process for basically anyone with a -- that's  
24 monitoring SCADA to be able to see those, and that's all --  
25 they're not just confined for some sort of control or operational

1 purposes at the facility --

2 THE WITNESS: Right.

3 MR. SHORI: -- they are visible to folks if they pull  
4 those up. That -- that's all I'm saying.

5 MR. CHHATRE: Okay.

6 MR. SHORI: And I think with that I'm done. Thank you.

7 MR. CHHATRE: Okay. Peter?

8 MR. GUNTHER: No, it's done.

9 MS. MAZZANTI: No questions.

10 MR. SPERRY: No questions.

11 MR. CHHATRE: I have one question, Ravin Chhatre, NTSB.

12 BY MR. CHHATRE:

13 Q. On the lines coming in to Milpitas, you said earlier  
14 that you can control and see those?

15 A. Yes.

16 Q. Or you can only see those?

17 A. Once they enter the station, we can control those lines,  
18 the pressure.

19 Q. And otherwise which system controls those lines feeding  
20 into Milpitas?

21 A. Who --

22 Q. Those -- I understand there are four lines coming up --  
23 three lines coming in to Milpitas?

24 A. Four lines.

25 Q. Four lines coming in to Milpitas.



1 A. Uh-huh.

2 Q. And once they enter Milpitas, San Francisco can control  
3 and see those?

4 A. That's correct.

5 Q. Who is controlling and monitoring those four lines  
6 before they come to Milpitas?

7 A. Well, you have to go to different screens, like we  
8 mentioned POS 7 and Sheridan Road. You'd have to go upstream and  
9 see those other stations where those lines are being -- or coming  
10 from, or going in to Milpitas.

11 Q. Okay, so --

12 A. And those are stations we can see and --

13 Q. Oh, so you can see even before they come to Milpitas?

14 A. Oh --

15 Q. Okay.

16 A. -- from the Oregon border down to Bakersfield --

17 Q. Okay. Great.

18 A. -- you just go upstream and downstream.

19 Q. Do you recall, since you -- do you recall ever seeing  
20 those pressures and flows from those lines coming in to Milpitas?

21 A. I was not monitoring those pressures. Yeah. I only  
22 have three monitors, and we have hundreds and hundreds of screens.  
23 And just, you know, prior to five o'clock I had been working on a  
24 San Ramon incident and, you know, we get orders and I -- there was  
25 -- I think I had an order up in North Bay and Sacramento and, you

1 know, I'm looking at Fresno and Burney and again, we only have  
2 three monitors.

3 Q. Sure.

4 A. Yeah.

5 Q. I guess my question was not that day, but I mean, do you  
6 routinely occasionally look at those lines coming in to different  
7 stations; at what places they are coming in as a part of --

8 A. Routine?

9 Q. -- the routine, yeah.

10 A. Yeah, you try to look -- you're trying to scope the  
11 whole system out throughout your work day. It's a 12-hour shift,  
12 you know, and as calls come in and orders come in, you're being  
13 directed to go to a certain area to do that work, but you're  
14 overall looking at -- we can look at a whole map --

15 Q. Okay.

16 A. -- of the whole system to actually see pressures too.

17 Q. So as a -- as I'm trying to understand with a huge  
18 system like this, and I guess three people controlling in San  
19 Francisco; am I correct?

20 A. Three operators with --

21 Q. Three operators, right.

22 A. -- with three monitors each.

23 Q. Is there some kind of a protocol or procedure or what  
24 you call clearance that, okay, every so often or every day or  
25 every other day we shall look at this line, this line, that

1 terminal which --

2 A. No, there's not.

3 Q. There is nothing?

4 A. No.

5 Q. So unless an SCADA operator takes initiative, you -- it  
6 could be weeks before you can even look at some lines?

7 A. There could be, yeah. There could be some remote  
8 station that I haven't --

9 Q. Right.

10 A. -- looked at in the --

11 Q. Okay.

12 A. -- in weeks.

13 Q. Yeah. I --

14 A. Yeah.

15 Q. Now, do you recall have you ever looked at the pressures  
16 and flows of lines coming in to Milpitas? Not that day, but I  
17 mean, you know --

18 A. Oh, sure. Yeah. I look --

19 Q. And do you remember, and if you do, tell me what the  
20 typical pressures and flows are coming in.

21 A. 550 on the average, I would say.

22 Q. So they are all kind of in that range?

23 A. Yeah.

24 Q. Not the same, but --

25 A. Not the same and not every day and -- but that's on the

1 average, around 550.

2 Q. So going back to those two valves, one is pneumatic and  
3 one is requiring electrical signal, until it goes to a regulating  
4 valve, which requires the electronic input, that particular valve  
5 is seeing 550 or whatever the incoming pressure is; is that  
6 correct or that is not correct.

7 A. Well, that's the upstream pressure entering the station  
8 and then it's going through the regulators where we have set  
9 points that, you know, reduce the pressure.

10 Q. And you can see that on your SCADA?

11 A. Yeah.

12 Q. If you choose to?

13 A. Yes. Yes.

14 Q. And for line 132, before it reaches the regulating  
15 valve, how many regulators are there before it reaches that point?

16 A. Wow.

17 Q. If you don't know, you don't know.

18 A. Yeah.

19 Q. But --

20 A. I would have to guess, but I'm --

21 MR. JAQUES: Don't guess.

22 BY MR. CHHATRE:

23 Q. No, don't guess. If you do not know, you do not know.

24 MR. JAQUES: We have other witnesses who can talk about  
25 it.

1 THE WITNESS: Yeah.

2 MR. CHHATRE: Yeah.

3 THE WITNESS: Yeah, I mean, I'd have to look at them.

4 BY MR. CHHATRE:

5 Q. Okay.

6 A. I'd have to look at the screen.

7 Q. So do you ever --

8 A. There's quite a few.

9 Q. Okay. Do you ever monitor those?

10 A. Sure.

11 Q. That the regulators are working properly and --

12 A. Yes. Yeah. I mean, we -- when we issue a set point  
13 just downstream of that valve, that's the pressure we want to  
14 eventually see.

15 Q. And what is the pressure upstream of that regulating  
16 valve from 132, typically?

17 A. Well, there's not a 132 that's entering Milpitas.

18 Q. No, no, I said -- okay.

19 A. So --

20 Q. Common header.

21 A. Yeah, I mean --

22 Q. I'm trying to understand how -- the lines are coming in  
23 at 550. Somehow the gas gets mixed up, if I understand correctly.

24 A. Yeah, it's go -- it's being reduced through the  
25 regulators.

1 Q. Okay. And there are several of those?

2 A. Uh-huh.

3 Q. So the pressure's being dropped or just maintained, or  
4 how does that work until it goes common header for all these three  
5 lines leaving -- four lines leaving Milpitas?

6 A. Yeah, well, it's being reduced.

7 Q. And so you are -- you can monitor that?

8 A. And we are monitoring it, yeah.

9 Q. And do you recall how the pressure dropped from let's  
10 say 550 to whatever pressure the regulating valve is seeing, how  
11 many steps you are to kind of monitor to see what is coming into  
12 that valve?

13 A. Well, it depends where we're --

14 Q. Okay.

15 A. -- where we're -- where we are controlling it at.

16 Q. Okay.

17 A. We can be controlling it --

18 Q. That's fine.

19 A. -- at the common header or the --

20 Q. That's fine, yeah.

21 A. -- or the Milpitas mixer. There's -- we have a lot of  
22 options at that station.

23 Q. Okay. I guess the only thing I want to know is what was  
24 the pressure upstream of that regulating valve --

25 A. Uh-huh.

1 Q. -- for 132, typically, if you can tell that range?  
2 Because if you're going through (indiscernible) the regulator, how  
3 do you know?

4 A. Yeah, it's -- once -- you have various lines coming into  
5 the station and 132's not an incoming line.

6 Q. Correct.

7 A. And then it's going through the headers and then it's  
8 going into the mixer. And then from the -- all the lines are  
9 going into the mixer.

10 Q. And do you monitor the mixer?

11 A. And then from the mixer it's going into different -- out  
12 to different lines.

13 Q. Okay.

14 A. Outgoing different lines.

15 Q. And can you see and monitor or control the mixer?

16 A. Yes. That's the whole main purpose of that station.

17 Q. Purpose.

18 A. Yeah.

19 Q. What is typically the pressure range in the mixer?

20 A. Before or after the accident?

21 Q. Everything at the time of the accident.

22 A. Normally we keep it around 370.

23 Q. 370?

24 A. Yeah, 370 --

25 Q. And then --

1 A. -- 365 to 370 --

2 Q. Seventy.

3 A. -- four, so --

4 Q. So upstream valve for all these different lines going --  
5 leaving Milpitas should not be seeing anything more than 375?

6 A. That's correct.

7 Q. Is that correct (indiscernible)?

8 A. That's correct, yes.

9 (Off the record.)

10 MR. CHHATRE: Ravin Chhatre, NTSB.

11 BY MR. CHHATRE:

12 Q. So you believe that's set at 375. What is the, I guess,  
13 is there an error in the readings what that may be or there is no  
14 error, the reading that's pretty accurate what you see and the  
15 valve settings?

16 A. You're referring to like an offset?

17 Q. Correct.

18 A. If I put a 375 set point on my reg could I see 374, 376?

19 Q. Right.

20 A. Yes.

21 Q. And --

22 A. Most of our stations are very accurate with the set  
23 points. Some have offsets.

24 Q. Okay.

25 A. Some have large offsets. And -- because the regs move.



1 Q. Okay.

2 A. And they -- that's why we have weekly maintenance and  
3 monthly maintenance.

4 Q. Okay. To minimize that offset?

5 A. To minimize the offset as part of the work they do.

6 Q. And what is your typical offset at Milpitas? If you --

7 A. Oh, maybe one pound.

8 Q. Okay.

9 A. And it floats, because you have a load. People turning  
10 on their, they're taking a shower, their water heaters are kicking  
11 on. They're turning on their heaters, so you have a strong pull,  
12 a load. Well, that load is pulling the gas downstream and so that  
13 reg is, you know, it's moving up and down trying to hold that set  
14 point. So you're going to see a pound or two --

15 Q. Plus minus?

16 A. -- fluctuate, right.

17 Q. Plus minus on that, just to meet the demand?

18 A. Right, exactly.

19 Q. Just to meet the demand.

20 A. Exactly.

21 Q. Not because of an instrumentation problem, just --

22 A. That's correct.

23 Q. -- just to meet --

24 A. To meet the demand.

25 Q. Okay. I just want to clarify.

1           A.    No, that's a very good way of putting it, meet the  
2 demand, right.

3           Q.    Okay. Right, meet the demand, okay.

4           A.    Yeah.

5           Q.    Okay, I'm still struggling with this of why 386 -- I'm  
6 trying to -- do you ever see the pressure increase downstream of  
7 Milpitas that you can monitor on SCADA? I mean, it's reading at  
8 375, there are fictional losses (ph.) on the line. Does it -- I  
9 mean, is it typical for the line pressure to go up --

10          A.    No.

11          Q.    -- as the gas leaves Milpitas on your SCADA?

12          A.    No. Actually, it would actually go a little bit lower  
13 because it's further down the line and you pipe -- the pressure  
14 gets reduced through the distance of the pipe.

15          Q.    Fictional loss are demand are --

16          A.    Yeah, right.

17          Q.    -- I guess, maybe. I mean, that's what I was thinking,  
18 but I just wanted to kind of --

19          A.    Yeah.

20          Q.    -- get confirmation that you guys don't see  
21 (indiscernible).

22          A.    That's correct.

23          Q.    Now on -- and I realize that on September 9 there were  
24 no crossties displayed on your SCADA system; that happened after.  
25 But there are some pressure reads, and I believe they were -- I

1 don't recall which station, but at one point the pressure read  
2 read around 390 or close to that at one location. At least that's  
3 the information we have. Or even seeing 386, why would that not  
4 raise alarm immediately as to since your pressure should not go  
5 up --

6 A. Well, it did.

7 Q. -- downstream.

8 A. It did, and that's when a phone call conversation with  
9 Oscar Martinez that I did have and I said hey, this looks real at  
10 Milpitas, and I -- and the reason why I said that is because I saw  
11 that higher pressure downstream.

12 Q. Okay. What's -- I guess the person who was, I guess,  
13 not in charge, but who was monitoring the clearance, was he  
14 looking at the pressure also, do you know? Did you have a  
15 discussion with him? I think you made the call saying it looks  
16 real, but --

17 A. The call was actually incoming to me. I just happened  
18 to answer that --

19 Q. Okay.

20 A. -- particular phone call.

21 Q. And was that information relayed to this person who  
22 was --

23 A. Yes.

24 Q. -- monitoring the clearance?

25 A. Yes. We --

1 Q. And my --

2 A. All three of us were looking at it at that point.

3 Q. Okay. And my question is, did the pressure jump  
4 instantly to 386 or was it kind of inching up?

5 A. I don't recall. I do recall pressure fluctuating  
6 rapidly in both directions from zero to a high read to a normal  
7 read.

8 Q. Okay. And was there any discussion amongst the three of  
9 you who were monitoring the situation after September 9 that --  
10 now that things, I mean, you know, hindsight is 20/20 and that we  
11 are -- this is something we should have been looking or was there  
12 any discussion of what happened or --

13 A. Well, we've had a number of operational changes as far  
14 as reducing the pipeline pressure in those pipelines down the  
15 peninsula, so -- and those pressures have actually changed a  
16 couple of times and so those are things that we need to stay on  
17 top of to make sure that we don't overpressure the pipe when we're  
18 putting in our set points.

19 Q. And was there any meeting with the -- I'm calling it  
20 SCADA group, but whatever you're --

21 A. The CITEC group?

22 Q. -- totem is?

23 A. Yeah.

24 Q. After September 9 was there any evaluation of what  
25 happened, any lessons learned like meeting?

1           A.    Not that I'm aware of.  There could have been through  
2 the -- they're management and there could have been meetings  
3 through the management.  As far as us operation -- operators  
4 involved --

5           Q.    But I mean --

6           A.    -- no.

7           Q.    -- I guess my question was not management, per se, but I  
8 mean as a SCADA unit, you know, if your supervisor, or whatever  
9 the chain of command may be --

10          A.    Uh-huh?

11          Q.    -- was there any kind of review meeting as to let's look  
12 at what happened or a lessons learned type meeting in the SCADA  
13 itself?

14               MR. JAQUES:  I think he answered that.

15               MR. CHHATRE:  I thought he said upper management, and I  
16 wasn't looking for the management.  I was looking for the worker  
17 bees and the immediate supervisors.

18               MR. JAQUES:  You may answer it again.  Uh-huh.

19               MR. CHHATRE:  Does that clarify your comment?

20               MR. JAQUES:  Yes.

21               MR. CHHATRE:  Thank you.

22               THE WITNESS:  Well, I mean, we've been getting a lot of  
23 emails, a lot of changes that are constantly going on at Milpitas  
24 and downstream of Milpitas.  It's -- it was a constant discussion  
25 in the department.  As far as a meeting specifically for what

1 happened, no, I don't recall a very formal meeting, you know,  
2 every -- it's been very informal --

3 BY MR. CHHATRE:

4 Q. Informal discussions?

5 A. -- discussions, yeah.

6 Q. And anything particularly that came out of those  
7 informal discussions, if nothing is formal called?

8 A. Just the sadness and the tragedy of the accident and --

9 Q. That we all shared?

10 A. And -- that we all shared and how we're looking at ways  
11 to, you know, make sure something like this doesn't happen again  
12 and, like I said, we're -- we've added now new stations and remote  
13 capabilities and --

14 Q. Yeah.

15 A. -- so.

16 Q. And thank you so much for your help.

17 A. You're welcome. Thank you.

18 Q. Makes understand just a little better.

19 A. Thank you.

20 MR. CHHATRE: Go ahead.

21 MR. KATCHMAR: I have -- Peter Katchmar with PHMSA,  
22 Pipeline Hazardous Material -- Pipeline and Hazardous Materials  
23 Safety Administration.

24 BY MR. KATCHMAR:

25 Q. Mike, do you know what an excess flow valve is?

1           A.    An excess flow valve?  No.  I know what a blow-off valve  
2  is.

3           Q.    No.  An excess flow valve is like a regulator in that if  
4  the flow increases by an abnormal amount it will restrict or  
5  close.

6           A.    Okay, the actual velocity, not the pressure?

7           Q.    Right.

8           A.    Yeah.  No, I'm not familiar with a valve like that.

9           Q.    Okay.  So I guess my next question is are there any in  
10 between Milpitas and San Bruno; what would you respond to that?  
11 If you don't know what they are, I guess you don't know if  
12 there --

13          A.    I don't.  I'm sorry.

14                MR. CHHATRE:  Off the record, please.

15                (Off the record.)

16                BY MR. KATCHMAR:

17          Q.    I apologize.  I used the term excess flow valve and I  
18 meant automatic shut-off valve.  Do you have any automatic  
19 shut-off valves between Milpitas station and San Bruno?  The  
20 rupture location at San Bruno?

21          A.    Yeah, not that I was aware of.  I --

22          Q.    Are you aware of one now?

23          A.    We have a line rupture control valve.  It's my  
24 understanding we have a line rupture control valve that feeds Half  
25 Moon Bay.

1 Q. Okay, so it is not on line 132?

2 A. I don't know.

3 Q. All right. Thank you. That's all.

4 MR. CHHATRE: Any other questions? If not --

5 MR. NICHOLSON: I've got a question.

6 MR. CHHATRE: Oh, Matt?

7 BY MR. NICHOLSON:

8 Q. Michael, you mentioned earlier that there were some  
9 screens added to SCADA since September 9th?

10 A. Uh-huh.

11 Q. Can you tell me which screens have been added?

12 A. Healy station, which I had mentioned earlier, and  
13 there's another one and I --

14 MR. GUNTHER: San Andreas.

15 THE WITNESS: San Andreas, yeah, right.

16 BY MR. NICHOLSON:

17 Q. So, the screens were added just to support the new --

18 A. Remote operations.

19 Q. -- operations.

20 A. That's correct. Yes.

21 Q. You said earlier also that an open valve is shown red in  
22 SCADA?

23 A. Yes.

24 Q. Is that consistent throughout your SCADA?

25 A. Yes. Yes.



1 Q. So running equipment is also red?

2 A. Running equipment?

3 Q. You don't have any compressors that you see?

4 A. Compressors? If the valve is open it's red, yeah. I  
5 see -- oh, I see what you're saying. A compressor, yeah, if it's  
6 on line, it's red.

7 Q. Red. Huh. Okay. Was that true on your old system,  
8 prior --

9 A. Yes.

10 Q. Okay. It's not confusing to see red as open instead of  
11 closed?

12 A. When you're first an operator in training, you kind of  
13 think of a stoplight and it's kind of backwards, yeah, but --

14 Q. Okay.

15 A. -- you learn quickly.

16 Q. Can you tell me -- I didn't sit in your previous  
17 interview. The -- how's the alarm screen arranged for gas  
18 control?

19 A. It's a time line. As the --

20 Q. Chronological?

21 A. Chronological.

22 Q. Okay.

23 A. Yeah.

24 Q. And it's just one alarm screen?

25 A. It -- it's one alarm screen, but it could be multiple

1 pages.

2 Q. Okay.

3 A. It could -- we could have enough alarms to where we have  
4 to go to a second page.

5 Q. Okay.

6 A. Page down.

7 Q. And how many severities are there on your alarms?

8 A. Well, there's -- there's several different types of  
9 alarms that come in a various different colors and how they're  
10 broken down in colors I can't tell you for sure. I don't know. I  
11 believe it's the urgency of responding to that alarm. Some are  
12 red, some are -- when they clear they turn green. Some are  
13 orange, some are white, and --

14 Q. Is red the most urgent?

15 A. Yeah, I don't know for sure on which -- on the color  
16 scheme of the alarms.

17 Q. We talked earlier about values that come in that you  
18 called them glitches. Do they come in -- do you get question  
19 marks on your screen for a bad read, or how does that --

20 A. Usually it'll show up on the -- well, if it's in long  
21 enough, it'll show up on the alarm summary at --

22 Q. As what, bad values?

23 A. It -- well, it depends on what -- yeah, bad value.

24 Q. Okay. And can you -- do you have the ability to  
25 manually pull that point if you're getting a bad read or a frozen

1 value?

2 A. Yeah. We can go to the remote terminal unit and look at  
3 the RTU and actually try to, if -- say it's a bad -- the RTU has  
4 failed.

5 Q. Uh-huh.

6 A. Then we could actually go to the -- that RTU and try to  
7 clear the errors and reset it and do a demand scan to try to bring  
8 the communication back.

9 Q. Okay. Does this -- does the new SCADA system utilize a  
10 hydraulic model or create what's been called a expert alarms  
11 beginning, something like that?

12 A. Not that I'm aware of. I don't know.

13 Q. As far as work load, I don't have a good feel from these  
14 interviews how the work's divided up. It sounds like phone calls  
15 come in and any three of the operators on the desk can answer?

16 A. That's correct. Yeah.

17 Q. Okay. How is the work divided up between the three  
18 controllers? Receipts and deliveries, south end of the system,  
19 north end of the system? How?

20 A. No, it used to be. We used to be separated north and  
21 south when we had four operators on duty and we've reduced our  
22 head count reduction to three and, yeah, whoever's available to  
23 answer that phone call or whoever picks it up first. When an  
24 order's coming from the gas transmission coordinators, it's typed  
25 on the GLS most of the time and whoever happens to be available to

1 see it first and answer it, then they would go ahead and make  
2 those operational moves.

3 Q. So the three of you are looking at the same screens?

4 A. No.

5 Q. Okay.

6 A. There's hundreds and hundreds of screens. I could be  
7 looking at Eureka, Fresno and Bakersfield and the guy next to me  
8 could be looking at San Francisco, Milpitas and San Jose and the  
9 next guy could be looking at Yosemite, Stockton, Sacramento.

10 Q. But are you designated a region?

11 A. Nope.

12 Q. No?

13 A. Not any more.

14 Q. Okay.

15 A. We used to. We used to be.

16 Q. All right.

17 MR. CHHATRE: Okay. Ravin Chhatre. I just have a quick  
18 follow-up question.

19 BY MR. CHHATRE:

20 Q. So, how do you know who's monitoring what or could you  
21 be -- three of you looking at the same stuff at the same time?

22 A. It's possible.

23 Q. Okay.

24 A. It's possible.

25 MR. CHHATRE: Matt?

1 BY MR. NICHOLSON:

2 Q. So, to follow up with that, then, how do you decide what  
3 you're going to look at on a screen? How's that --

4 A. Well, I think just from our own experience and training  
5 and what we know, we kind of have our own stations that we like to  
6 monitor. I know there's certain stations that I like to go to  
7 when I first start my shift to go -- these are active -- very  
8 active stations that we get a lot of orders for and I like to see  
9 where they're at. I can't speak on behalf of the other operators  
10 and the way they do their daily functions.

11 Q. So there's no issue if you like these stations and your  
12 partner, the other guy -- controller there also likes the same  
13 stations and you're both just looking at the --

14 A. That's a possibility.

15 Q. It could happen, huh?

16 A. It could happen.

17 Q. Okay. Kind of leaves part of the system unattended,  
18 then, in a sense, right?

19 A. Well, we shouldn't be just having the same three  
20 stations up for 12 hours.

21 Q. Okay.

22 A. I personally like to keep the alarm summary up on one  
23 where I can monitor the alarms. I like to keep any operational  
24 moves that I'm making up on another monitor.

25 Q. Okay.

1           A.    And then use the other one to go around the system to  
2 look at various stations.

3           Q.    So is your alarm screen the same as the other two --

4           A.    Yes.

5           Q.    -- persons'?

6           A.    They're all exactly the same. All the --

7           Q.    So if --

8           A.    All the screens are the same.

9           Q.    So they could acknowledge an alarm?

10          A.    Uh-huh.

11          Q.    And you would just see it clear?

12          A.    We could be clicking them -- on the alarm at the same  
13 time.

14          Q.    Okay. So how do you know that alarm cleared from some  
15 -- an alarm didn't clear from someone else's actions?

16          A.    Alarm did not clear?

17          Q.    Well, so if someone had a high pressure and they changed  
18 the set point on a valve and then that alarm cleared?

19          A.    Uh-huh. That happens.

20          Q.    And how do you know that what he did made that alarm  
21 clear?

22          A.    Well, a lot of times I might be looking at it at the  
23 same time and then see his set point change.

24          Q.    Okay.

25          A.    Maybe I was about to make the same move and he beat me

1 to the punch, yeah.

2 Q. Okay.

3 A. Yeah.

4 Q. And you talked about the gas logging system and --

5 A. Uh-huh.

6 Q. -- and I think you said orders? So you're making  
7 deliveries; is that what you guys are doing?

8 A. Operation orders? Yeah.

9 Q. Yeah.

10 A. We can't make any moves as far as operational orders  
11 without being asked to by the transmission coordinators.

12 Q. Okay. And these are deliveries to customers?

13 A. These are set point changes in the system.

14 Q. Pressure changes?

15 A. And sometimes we get flow orders.

16 Q. So you do have flow meters at point of demand?

17 A. At various stations.

18 Q. Oh, at various stations? Oh, okay. I thought in the  
19 first interview there was a lot of talk about flow meters, and I  
20 thought I heard -- I thought I read that there were no flow meters  
21 on the system. Is that incorrect? You have flow meters at some  
22 stations?

23 A. Yeah. Well, I mean, we can operate -- we -- in flow  
24 control at various stations.

25 Q. And that's flow meter; it's not a calculated flow, it's

1 a actual flow? There's a flow meter device?

2 A. Yeah. I mean, they might give us an order, say go to  
3 two million an hour --

4 Q. Okay.

5 A. -- flow rate on this particular line at this station.

6 Q. Okay. Is Milpitas a station with the flow?

7 A. Yes. Well, it has both pressure and flow.

8 Q. And what's the station downstream of Milpitas?

9 A. I don't recall off hand right now. I have to --

10 Q. Okay.

11 A. -- we have so many stations. I just -- I don't have  
12 everything memorized geographically.

13 Q. Okay.

14 A. That's why we just need to have our resources in front  
15 of us to --

16 Q. Okay.

17 A. -- to see, so --

18 Q. So you -- so I'm guessing, and I'll see this when I go  
19 to the control room--

20 A. Uh-huh.

21 Q. -- but I'm guessing then you have a screen that maybe it  
22 itemizes all the flows and then does it totalize a flow for a line  
23 so you -- you know, does it itemize flow by station?

24 A. I --

25 Q. Or anything?



1 A. No, I don't --

2 Q. Okay.

3 A. -- think so.

4 Q. So you have to bring up a station to see the flow?

5 A. Yes.

6 Q. Okay. All right. You don't have a summary screen for  
7 flows?

8 A. No.

9 Q. Okay. A little bit about training. I was curious what  
10 kind of training a controller would go through for recognizing  
11 abnormal operating conditions. Can you tell me what's typical for  
12 yourself?

13 A. Just on that particular situation?

14 Q. Well, any -- what kind of training do you have for  
15 abnormal operating conditions, recognizing abnormal?

16 A. Well, we have a -- an alarm policy where when an alarm  
17 comes in we address it by going to that station and seeing why  
18 it's in alarm, and then we would make the necessary notifications  
19 to have it addressed if it's something that we can't do remotely.

20 Q. Okay. So it's pretty much written around alarms?

21 A. It is. I mean, I always have the alarm summary up.

22 Q. Do you do any --

23 A. It's because --

24 Q. I'm sorry, go ahead.

25 A. Oh, I mean, that's -- it's an audio and a visual alarm

1 and it's -- that's how the system, I feel it talks to me.

2 Q. Uh-huh.

3 A. You know? It makes you look at that particular alarm  
4 and then go to that station.

5 Q. Okay. So is there any simulator training done?

6 A. We -- no. We have CBTs. I'm trying to remember way  
7 back when when I first started my training. We have CBTs,  
8 computer based training or WBTs, web based training programs.

9 Q. Okay.

10 A. That you go through to get the basics, and then you're  
11 pretty much sitting with an operator and listening in on phone  
12 calls, starting to get a little hands-on training as you're  
13 starting to make some moves. I know our DOT testing included a  
14 simulated line break or a valve that got closed and is locked in  
15 the closed position.

16 Q. Okay.

17 A. There's different scenarios for the training. You don't  
18 know which one you're going to get. And that was a simulated --

19 Q. That was a live -- a SCADA simulator?

20 A. Yeah.

21 Q. Okay.

22 A. That's correct. Yeah.

23 Q. But that's not something you do every year or three  
24 years?

25 A. No.

1 Q. Okay.

2 A. No, I think it's every three to five years, something  
3 like that.

4 Q. It is every three to five years?

5 A. I believe so, yeah.

6 Q. The simulator training?

7 A. Yes.

8 Q. Okay.

9 A. Yeah.

10 Q. How quickly can you access a pressure trend if you have  
11 to get to one in your system? The new system, CITEC?

12 A. So if I just see a pressure come into alarm and I go to  
13 trend it?

14 Q. Yeah.

15 A. Just a couple seconds.

16 Q. Is it a right click, couple of clicks?

17 A. I -- yeah -- I'm trying to think here.

18 Q. Or do you have to build --

19 A. I -- you have to move your cursor to that pressure and  
20 then right click on it and then you'll get a -- it's a Windows  
21 program -- CITEC's a Windows so you'll get a drop down box or a  
22 pop up box and then it'll show you the trend and then you can  
23 actually can look at it in minutes or hours. You can scale back,  
24 look at it in days, weeks.

25 Q. Can you bring other tag names in fairly easily for

1 overlay?

2 A. You can. You can bring up another pressure right above  
3 it if you want to -- let's say it's a dual run and you see the  
4 pressure and you can put a -- the boxes on top of each other to do  
5 a comparison.

6 Q. Okay. Last question. The alarms. Setting alarms. Do  
7 you have the ability to make changes to the low alarm value?

8 A. Yes. The low and the high only.

9 Q. Okay.

10 A. Not the low low and the high high. They're set by the  
11 engineers.

12 Q. Okay. Give me a name. Who's the engineer? Who are we  
13 talking about in the control center?

14 A. Well, no, these would be the engineers that are -- that  
15 handle their own service territories --

16 Q. Oh, okay.

17 A. -- by regions or areas.

18 Q. Okay.

19 A. Divisions or districts.

20 Q. Okay.

21 A. That engineer --

22 Q. So it's by region?

23 A. Yeah.

24 Q. That's all I had. Thank you, Mike.

25 A. Thank you.

1 MR. CHHATRE: Mr. Fassett?

2 MR. FASSETT: I have a follow-up. Just a couple of  
3 follow-ups.

4 BY MR. FASSETT:

5 Q. On how your work is prioritized, how you know what  
6 screens to pull up or what work to do or what you address, from  
7 what I heard, that could be a series of phone calls coming in,  
8 that could be the transmission coordinator saying work on this  
9 work, or if you're not assigned that you could be looking at other  
10 things, but the prioritization is set, really, through the  
11 transmission coordinator or the phone calls; is that correct?

12 A. That is correct.

13 Q. And then relative to operator qualification, what we  
14 referred to in part 192 as subpart N, do you -- what operator  
15 qualification task -- are you under an operator qualification  
16 requirement for any of the tasks you perform?

17 A. Yes.

18 Q. And in those tasks, does it tell you what the abnormal  
19 operating condition would be for those tasks?

20 A. Yes.

21 Q. And -- what was the other one I was thinking of? I  
22 think that was it. Thank you.

23 A. Thank you.

24 MR. CHHATRE: Anybody else with any follow-up questions?  
25 If not, thank you so much for your time.

1 THE WITNESS: Thank you very much.

2 MR. CHHATRE: It was a long time. We appreciate it.

3 (Whereupon, the interview was concluded.)

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CERTIFICATE

This is to certify that the attached proceeding before the  
NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:           PACIFIC GAS & ELECTRIC COMPANY  
                                  SEPTEMBER 9, 2010 INCIDENT  
                                  SAN BRUNO, CALIFORNIA  
                                  Interview of Michael Valenti

DOCKET NUMBER:           DCA-10-MP-008

PLACE:                    Burlingame, California

DATE:                     January 4, 2011

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.

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Patricia Noell  
Transcriber