

**Appendix I**

Lloyd Tieken, Olympic – Interview and Deposition Transcripts

Pipeline Rupture and Fire  
Bellingham, Washington  
June 10, 1999  
DCA-99-MP-008

1 of that you feel like needs to be brought to our  
2 attention to complete our investigation of the  
3 accident?

4 A Not that I can think of. If I think of  
5 something off line, I'll get back to you.

6 MR. SMYTH: I would appreciate that. Thank  
7 you.

8 INVESTIGATOR BESHORE: Let's go off the  
9 record.

10 (Record paused.)

11 (Mr. Smith excused.)

12 INVESTIGATOR BESHORE: Mr. Tieken, my name is  
13 Allen Beshore. I'm a lead investigator for the  
14 National Transportation Safety Board into the pipeline  
15 rupture and fire that happened in Bellingham,  
16 Washington in June of 1999.

17 I want to thank you for answering some of our  
18 questions.

19 And what we're going to do is start off and  
20 I'm going to ask you a few questions. And when I  
21 either run out of questions or just need time to  
22 collect my thoughts, then we're going to go around the  
23 room and some of these other folks may have some  
24 follow-up questions for you.

25 So we're going to start off by introducing

1 ourselves again. We just did that. But, that way,  
2 you'll know who everybody is and who they represent.

3 Next to me -- he's not here right now --  
4 Cliff. He'll be around a little later. Cliff  
5 Zimmerman is with the National Transportation Safety  
6 Board also.

7 MR. PARRISH: I'm John Parrish with Daniel,  
8 formerly a...

9 MS. MAZZOLINI: I'm Dione Mazzolini with the  
10 Ecology and Environment.

11 MR. KATCHMARE: Peter Katchmare with the  
12 Office of Pipeline Safety.

13 MR. SMYTH: Geoffrey Smyth, City of  
14 Bellingham.

15 MS. PILKE-JARVIS: Linda Pilke-Jarvis with  
16 Department of Ecology.

17 MS. IMHOF: Patti Imhof, IMCO General  
18 Construction.

19 MR. CASH: Jim Cash with the same group.

20 MR. SAGER: Eric Sager, with NTSB.

21 INVESTIGATOR BESHORE: And, Mr. Tieken, you  
22 have a representative with you today. If he could  
23 identify himself?

24 MR. MARTIN: Michael Martin, appearing for  
25 Mr. Tieken.

1 Whereupon,

2 LLOYD HARRISON TIEKEN, JR.

3 having been duly sworn, was called as a witness and was  
4 examined, and testified as follows:

5 INVESTIGATOR BESHORE: Okay, and could you  
6 just state your full name for the record, please?

7 MR. TIEKEN: Lloyd Harrison Tieken, Jr.

8 BY MR. BESHORE:

9 Q And, Lloyd, if you could just describe for us  
10 your educational background?

11 A High school education. High school graduate.  
12 And the rest of it is just pretty much on-the-job  
13 training.

14 Q Could you go through your history, your  
15 tenure with Olympic Pipeline?

16 A Just Olympic, I've been with them since '94.  
17 Prior to that, I've had fifteen years with Mobile  
18 Pipeline.

19 Q And, in '94, when joining Olympic, what was  
20 your role?

21 A As an operational controller, pipeline  
22 controller.

23 Q Was that your role at Mobile?

24 A Yes, it was.

25 Q For your entire tenure there?

1 A No.

2 Q For the last, roughly, how many years?

3 A Total with Mobile was right in the  
4 neighborhood of five plus.

5 Q As a control?

6 A As a control.

7 Q Have your duties expanded or changed at  
8 Olympic pipeline since then?

9 A A little bit. As much as I would care to  
10 take on and attempt to pursue.

11 Q But, your title has been controller all  
12 along; is that correct?

13 A That is correct.

14 Q Did I understand you had some special  
15 assignments at times throughout your tenure? Is that  
16 correct?

17 A Yes.

18 Q And those involved were computer-oriented  
19 type issues?

20 A Yes, it was primarily building displays for  
21 the vector SCAZA system.

22 Q Now did you do any of that prior to the  
23 commissioning of Bay View or prior to --

24 A No.

25 Q So was your specialty --

1 A A little bit leading up to the commissioning.

2 Q So I guess your special assignment was  
3 basically to do the <sup>SCREENS</sup>~~screenings~~ for Bay View?

4 A Yes.

5 Q Is that fair?

6 A That's fair.

7 Q And had you built SCATA screens before?

8 A I had not.

9 Q So this was a new function for you?

10 A Yes.

11 Q Would you have any input in the design of the  
12 Bay View facility?

13 A Somewhat.

14 Q In terms of what?

15 A Just in terms of the end product. I mean  
16 there are definitely constraints, you know, display  
17 constraints that kind of limit you to what you can or  
18 cannot do.

19 But, yes, I pretty much decided on a basic  
20 layout and then <sup>rolled</sup>~~pulled~~ the dispatchers, ~~for my end~~.

21 Q In terms of layout, are you talking still in  
22 terms of display of information? Or did you have input  
23 into what information was recorded and obtained?

24 A Just the display of what information was  
25 available.

1 Q So the layout of the facility or the physical  
2 facility out there, did you have any input into the  
3 design of the ~~hiding~~ system or the monitoring systems  
4 or anything like that? The actual facility?

5 A No, sir.

6 Q Did you work then with what was called the  
7 Automation Group? Were you part of the group that was  
8 involved with that?

9 A I wouldn't say that. I was just primarily  
10 with the control center group and with Todd Smith, who,  
11 at that point in time, was a controller, ~~lead~~ <sup>LEAK</sup> detection  
12 person. And on special assignment doing ~~the displays~~ <sup>SCADA</sup>.

13 I was never -- never heard of any kind of  
14 alignment towards an automation. <sup>Being [unclear] for [unclear] [unclear] [unclear]</sup>

15 Q And so when you say you got the buy-in from  
16 the other controllers, you discussed with them methods  
17 of display of the data and what their thoughts were as  
18 you were building the screens?

19 A Yes, the displays themselves. Yeah, I would  
20 bounce ideas off of them. I could make up skeletons,  
21 nonfunctional skeletons, and put them out there for the  
22 guys to use, or just give me feedback on, and things  
23 like that.

24 Q And then throughout this time frame, you were  
25 also -- I believe you also operated a pipeline on shift

1 on occasion, too; is that correct?

2 A Yes.

3 Q So you had kind of a dual role. At times,  
4 you were a controller and you were also on a special  
5 assignment?

6 A Yes.

7 INVESTIGATOR BESHORE: Let's go off the  
8 record for a minute.

9 (Record paused.)

10 INVESTIGATOR BESHORE: Let's go back on the  
11 record here, if we can.

12 BY MR. BESHORE:

13 Q Okay, and we were talking about you had a  
14 dual role basically in terms of doing some display  
15 development as well as in filling in shifts as a  
16 controller.

17 And you mentioned that some of the screens  
18 you began to develop prior to actually Bay View coming  
19 on line. And you continued in that role, I guess, as  
20 Bay View was commissioned.

21 A Yes.

22 Q To finish up.

23 A Yes.

24 Q And since the accident, has your role changed  
25 again or are you --



1           A       I have, due to loss of one of the controllers  
2           and manpower issues, I have had less opportunity to  
3           work special assignment because I've been needed on  
4           shift. So I've been spending more time on shift as a  
5           controller.

6                    And continuing to work on displays and do  
7           display work and things as time allows, but not  
8           officially on special assignment.

9           Q       Let's talk about just the time frame shortly  
10          after Bay View was commissioned. Did concerns arise  
11          about the operation? Were there operational issues  
12          associated with the new facility a concern of some of  
13          the controllers?

14          A       Being a new facility and being completely  
15          unfamiliar, yes. And there was the concern that the  
16          facility itself being designed with 300 series piping  
17          basically plugged in to the middle of a 600 series  
18          system was a concern.

19          Q       That was a concern to all of you?

20          A       Yes. It just didn't make sense.

21          Q       And how did you guys express that concern?  
22          How did you personally I guess express that concern to  
23          others?

24          A       It was just kind of a general -- just a  
25          general concern since, you know, just "We don't like

1 this." We pretty much all voiced our opinion verbally.  
2 There was never anything written that I'm aware of.

3 Q Did you express your opinion to Mr. Brenson?<sup>†</sup>

4 A Oh, yes.<sup>^</sup>

5 Q He was the supervisor?

6 A He was my supervisor, yes.

7 Q Did he concur with your concern?

8 A He did.

9 Q Do you know if he took that on up the chain  
10 of command?

11 A I don't know.

12 Q Were there other concerns that arose as you  
13 guys were trying to operate the pipeline once the  
14 facility was installed? Do you recall?

15 A Just that it was difficult to operate due to  
16 proximity to Allen pump station. That created -- just  
17 made it difficult to operate.

18 Q That proximity, how did that manifest itself  
19 in the operational issue?

20 A If I -- do you mean from an operational  
21 perspective, how did I perceive this impact on the  
22 pipeline that Bay View facility had? Is that what  
23 you're asking?

24 Q Yes.

25 A Basically, on routing over to, through and

1 back -- see, we had a pipeline running straight to  
2 Allen. We routed approximately two miles over, two  
3 miles back. And that Bay View facility routed through  
4 a series of three control valves, number of 90s, you  
5 know, through a bunch of equipment, which basically  
6 made it more difficult, or just increased the  
7 restriction.

8 What I want to say is increased the pressure  
9 drop between the discharge of the source station to the  
10 suction side of Allen.

11 And what that means is with having large  
12 2,500 horsepower large impeller pumps at Allen station,  
13 they take a pretty good bite, it made product supply  
14 just a little trickier in starting those pump units.

15 Q Let me try and digest that to where I  
16 understand that. One of the issues then was because of  
17 the size of the pumps at Allen, you may draw product  
18 away too quickly from Bay View because it was so close?

19 A Yes. Yes.

20 Q And now I guess also, given how close these  
21 facilities are together, any problem or upset on either  
22 one or the other one, your reaction time is pretty  
23 short?

24 I'm guessing.

25 A That's part of it.

1           Q     If you had something go down in Allen, you  
2     didn't have much time to do anything before its  
3     impacting Bay View.  Would that be correct?

4           A     Yes.  There was no time.  There was just no  
5     time.

6           Q     Do you recall some of the specific issues  
7     that were happening that were concerns that people were  
8     trying to understand how to operate the system as it's  
9     being designed?

10          A     Well, the primary concern was the fact that  
11     the facility was designed to protect itself at 700 psi  
12     rating.  It would go into shutdown mode and isolate.

13                     When the pipeline was running on top and we  
14     were flowing at maximum rate, if we had a major upset  
15     at the Allen pump station, we would be hardpressed to  
16     avoid triggering that 700-pound threshold and incurring  
17     this resultant isolation of the Bay View facility.

18          Q     So the incoming valve into the receiver at  
19     Bay View would close?

20          A     As well as the outgoing, yes.

21          Q     Okay, so they both --

22          A     The facility protected both sides, yes.

23          Q     And then that would obviously cause  
24     operational havoc, I guess.  Well, havoc is not the  
25     right word, but...

1           A       Yeah, it created, you know, it did what it  
2 was supposed to do and it just created some problems to  
3 deal with, you know. Fortunately, the valve travel was  
4 relatively slow so we had adequate time to be able to  
5 respond to these scenarios.

6           Q       Was your response basically to shut the  
7 pipeline down because this was occurring?

8           A       Yes, sir, that's all you could do.

9           Q       That's all you could do?

10                  Well, sometimes, I guess shut down quick  
11 enough to where you didn't even have an opportunity to  
12 shut it down, it just did so kind of itself?

13                  Is that true?

14           A       Well, I think several of the scenarios have  
15 all had a chance to play out there. There were times  
16 when, you know, we were running the line and we learned  
17 to run the line in a way where we could run effectively  
18 and avoid that 700-pound pressure load.

19           Q       Okay, let's run through the scenario where  
20 you're doing a switch from Renton to Seattle. Just  
21 kind of run through that scenario for us.

22                  Now you're aware that there's this potential  
23 for the valve to close, shut down this facility.

24                  How do you try to avoid that happening in  
25 that scenario?

1           A        If we're routing the pipe from, you know,  
2           from Renton from a typical profile to Seattle, the  
3           overall pipeline <sup>loss</sup> is being increased by 9,600 barrels.  
4           So your pressure load is increasing gradually.

5                    You have a fairly long period of time,  
6           depending on how we were running into Renton, and it's  
7           all subject to the profile running into Renton. If we  
8           were at minimum back pressure set point on the Renton  
9           delivery, the line between Allen and Renton is pretty  
10          flat, pretty low-pressure profile, okay.

11                   So that when you swing to Seattle, you've got  
12          a substantial time frame before you absolutely have to  
13          get a unit on. And even then, the pressure is rising  
14          slowly.

15                   The next step would be to boost at  
16          Woodinville station to offset that increasing pressure  
17          loss gradient with the use of lift from that unit.

18                   At the same time also, your flow rates, your  
19          maximum flow rate into Seattle is about 2,000 barrels  
20          an hour lower than it is into Renton.

21                   So you've got flow rate restrictions that  
22          kind of max you out as well. So you'll want to be  
23          reducing more to balance this profile.

24           Q        Okay, so your main goal is to get Woodinville  
25          started, and then you do basically -- you didn't have

1 to necessarily start units further on back up the  
2 system, or you just adjust?

3 A You would probably want to drop units up  
4 north. Now this is all assuming that we're wanting to  
5 get a maximum rate. This is an assumption. Okay?

6 Q Okay.

7 A In that we don't want to go slower than  
8 8,000. If that's the case, we wouldn't stop  
9 Woodinville. We would just shut down units north. We  
10 wouldn't start Woodinville, just run the line to gain  
11 the desired rate.

12 Q Okay, well, I guess my question is just you  
13 have to start at getting it at Woodinville.

14 A Yes.

15 Q In order to effect this delivery change.  
16 But, once you've got that under control, you don't  
17 really have to do a lot I guess on backup the system.  
18 It's more adjusting flow rates?

19 A I would say that is a true statement. That's  
20 a true statement.

21 Q And you're going to have some time to make  
22 those adjustments, more so?

23 A Yeah, yeah, I mean, I can't say. The time  
24 window is relevant once again to the pressure load.  
25 But, you know, my perception of the normal profile and

1       how I run the pipeline, you know, my experience is that  
2       way.

3                   It gives me this history that I'm drawing  
4       these answers from.

5       Q       That's what we're trying to get.

6       A       And that is what I would do. I believe then  
7       we would, yes, to restrict the north end, we might drop  
8       -- if we're sourcing out of Anacortes, or are we  
9       sourcing out of Ferndale, you know, that's another part  
10      of this.

11                   And I'm assuming in this profile you want a  
12      Ferndale checkpoint source?

13      Q       Yes, coming down from Cherry Point.

14      A       Same profile as the day of the accident?

15      Q       Yes.

16      A       In that case, yes, we would restrict at  
17      Ferndale by pressure set point on the control valve.

18      Q       Would you quit injecting the DRA at any point  
19      in that sequence? So you, I guess were you personally  
20      operating the system at any time when this ~~valve flows,~~  
21      this station at Bay View was isolated? <sup>^</sup>

22      A       Yes.

23      Q       Do you recall how often that might have been?

24      A       It was fairly often, you know, until we  
25      learned how to deal with it. It was fairly often.



1 Q Do you recall what the circumstances were in  
2 any of those cases leading up to that occurrence?

3 A I would say primarily all of them were an  
4 Allen failure of some sort. And the inability to get a  
5 response into Ferndale station before that pressure  
6 load rose above the 700 psi point.

7 Q Okay, so what kind of things were happening  
8 that might trigger that?

9 A When you're running fast, when we were  
10 profiled to run fast or on top, as is how we refer to  
11 it, I believe we were running both the big units at  
12 Ferndale, maybe even the third unit, you know, to where  
13 we're really, really moving product as fast as the  
14 system would allow.

15 And Allen pump station would be on -- would  
16 basically be on suction. After -- when we would run on  
17 top through Bay View without boosting at Bay View, we  
18 could actually pull away from Ferndale with Allen  
19 station.

20 In other words, pump faster out of Allen than  
21 they could supply through Bay View.

22 Q Okay.

23 A Okay, so what happens then is, if we're  
24 running that way on top and we lose one of our 2,500  
25 horsepower units, you know, which is pushing, putting

1 up, you know, 500-700 pounds, well, that's  
2 automatically translated upstream.

3 And if that pressure load at Bay View is  
4 sitting at, you know, a hundred pounds, 60 pounds even,  
5 you know, you're real near that 700-pound threshold.  
6 Just with the loss of one unit.

7 And what happened then is there were three  
8 control valves at Bay View, which is less than 2,000  
9 barrels or 3,000 barrels upstream of Allen station.

10 And if any one of those came into play for  
11 whatever reason, depending on its role, if it actuated  
12 at all, then that feed to Allen station was disrupted  
13 and we would end up losing the other pump.

14 So you've got -- if you think about it,  
15 you've got four control valves within 3,000 barrels.

16 Q There's another one at Allen.

17 A Right. Right. Three at Bay View and the  
18 fourth at Allen. And the interaction of those and  
19 their characteristics all made it extremely tricky to  
20 keep balanced.

21 Q Now there were several emails I was going to  
22 ask you about on control valve issues. They went out  
23 ? in <sup>47</sup>rollers to setpoints. And I can find it, if you  
24 need, to recollect with regard to memory.

25 But, do you remember that issue specifically?

1 Can we try and help explain what was trying to be  
2 accomplished by those set point changes?

3 A The secondary control valve, which was  
4 working its primary role at this point in time on the  
5 incoming side of the facility, its role was to act as a  
6 back pressure regulator to maintain a minimum pressure  
7 rating across the meter run for adequate measurement.

8 When we'd run Allen pump station, you know,  
9 if we didn't keep pressures just right, it would start  
10 controlling back to hold a minimum. I think originally  
11 it was set at 25 psi.

12 And then it was lowered to 10 because we  
13 needed that extra 15 pounds to feed out.

14 Q Because it would restrict flow to try and  
15 keep back pressure on the meters?

16 A Correct.

17 Q And that's the one that --

18 A And that's part of it that would cause --  
19 that was one of the elements that might and may have  
20 and did cause interaction between the pump stations and  
21 the facilities.

22 Q Do you recall whether problems of Woodinville  
23 set point had caused pressure backups back into Allen  
24 similar to what might have happened on the day of the  
25 accident? Do you recall that ever happening to you?

1           A       Well, I don't recall it specifically. But it  
2 stands to reason that when you're in that profile and  
3 you're pumping on top with Woodinville boosting with  
4 two pump stations, or two pumps, and a power bump hits  
5 it, you know, being an electrical drop, and both units  
6 fall down, well, that pressure wave is coming up line  
7 and you're going to lose something at Allen.

8                   And, you know, the domino effect.

9           Q       What were the discharge pressures... never  
10 mind. Let me just move on.

11                   At any time during the process when people  
12 were trying to evaluate these concerns at Bay View, did  
13 anybody mention to you that there were concerns about,  
14 or did anybody express any concerns about the relief  
15 valves not functioning?

16           A       We were primarily operating in a tight line  
17 mode and there was concern that the relief valves were  
18 not functioning properly. And those concerns were  
19 voiced on occasion and the valves were tested.

20                   The mechanics came right out and tested and  
21 checked them and set them. And, you know, did what  
22 they were supposed to do and basically told us they  
23 were working properly.

24           Q       Okay, do you remember ever personally doing  
25 that?

1 A I do.

2 Q And so you contacted a technician and said  
3 what?

4 A Oh, you mean as far as initiating the concern  
5 about a relief valve not doing what it's supposed to be  
6 doing?

7 A Right.

8 Q I seem to recall doing that, yes.

9 Q Do you recall who it was that you were asked  
10 to check it out or mentioned it to?

11 A I want to say Ron <sup>GREENIDGE</sup>~~Greenage~~. The area chief  
12 at that point in time, I believe, would have been David  
13 Justice, as well as my supervisor, Ron Bren<sup>+</sup>son.  
14 ^

15 Q And your understanding was that they went out  
16 and checked things out?

17 A Every time I expressed a concern, it was  
18 addressed. You know, I can't give you specifics but I  
19 want to say of my own personal knowledge of them  
20 testing and checking those relief valves and checking  
21 the settings was in the neighborhood of four to six  
22 times, just, you know, of my own experience.

23 Maybe more like three to five at the most,  
24 something like that.

25 Q Was this something documented in written form  
or was this a verbal communication?

1           A       Well, my communication was primarily verbal.  
2       As far as the documentation on site by the individual  
3       who did the work, you know, I don't know what he did:

4           Q       Well, I was thinking in terms of you  
5       reporting this to somebody that was documented that  
6       there was a verbal report.

7           A       Oh, a specific documented report? No.

8           Q       You picked up the phone and called somebody.

9           A       Said, "Hey, we're having this problem. Would  
10      you check it out?" And then, you know, pass it on to  
11      my supervisors if the problem wasn't addressed.

12          Q       And would they call you back and say, "Hey,  
13      we came out and checked it out"?

14          A       Generally, I would be on duty when they would  
15      be there doing the calibrating. And then they would  
16      actually reduce the release spring load to a lower  
17      pressure and actually run product through it to verify  
18      that the valve is functioning.

19          Q       Okay, and you were in contact with them when  
20      that was going on, basically?

21          A       Yes.

22                    And, you know -- yeah, and trying to run the  
23      pipeline while they basically dropped the pressure out  
24      from under me.

25          Q       Well, I guess whenever they're doing

1 something like that, they make you aware of it because  
2 you're going to see an indication right here and know  
3 what's going on.

4 A Oh, yes. Oh, yeah, I'm aware of it ahead of  
5 time and I can just basically watch it happen. And if  
6 they're too slow, there's nothing I can do. You know,  
7 I'm shutdown.

8 Or, yeah, if they're too slow. So I'll try  
9 to have as much pressure there as I can handle and then  
10 they'll do their thing. And if they're quick enough to  
11 where they test it and they don't route all the stream  
12 to the tank, well, then we're --

13 Q And you can see this physically and pressure  
14 fluctuations on the SCADA<sup>D</sup> system when they were doing  
15 these tests?

16 A Yes.

17 Q Do you remember -- I was going to ask you for  
18 dates, but that's probably asking far too much. Do you  
19 remember any specific dates?

20 A I can give you the time frame. Between, I  
21 would say, the first -- before June 10 in that six  
22 month period, but no specific dates.

23 Q All right. And you were aware, or were you  
24 aware, I guess, that this relief valve, or valves were  
25 basically set at the lower pressure than the 700

1 pounds? And, basically, it was kind of a two-tiered  
2 protection system; correct?

3 A Correct.

4 Q Did you experience the same types of concerns  
5 on the 10th coming through Bay View as on the 16th?

6 A Yeah.

7 Q And so, personally, that happened to you also  
8 as you were operating the system?

9 A Yes.

10 Q That would be the incoming block valve, I  
11 guess, or incoming -- it might be a receiver valve on  
12 the ~~end course~~ <sup>ANACORTES</sup> side?

13 A If a 700 pound threshold was hit, all sides  
14 were closed. Incoming and outgoing.

15 Q Oh, okay, well, I --

16 A The facility would shut down, yes. And, yes,  
17 the incoming, yes.

18 Q I'm sorry. I just want to clarify, but both  
19 the incoming and outgoing on the same pipeline would  
20 close when 700 pounds was... correct?

21 A Correct.

22 Q So it would also be the same thing if it was  
23 the ~~end course~~ <sup>ANACORTES SIDE</sup> side?

24 A Yes.

25 Q But it would not affect the Ferndale side if



1 that happened?

2 A I don't believe it would.

3 Q But it would affect both the incoming and the  
4 outgoing with OSHA? ??

5 A That's correct.

6 Q Do you remember any other issues in terms of  
7 Bay View's facility that were a concern to people?

8 A The application of a single relief, or surge  
9 relief flow switch that applied to all of the relief  
10 valves.

11 Q I'm sorry. I didn't mean to interrupt.

12 A That was a concern. The other concern was  
13 just the fact that, you know, transient pressure waves  
14 travel so rapidly and with the proximity of Bay View  
15 being so close to Allen, we were all concerned that,  
16 you know, those pressure waves could pass through the  
17 facility more rapidly than any physical device could  
18 respond.

19 And that concern was voiced as well by pretty  
20 much the group as a whole, the control center group as  
21 a whole.

22 Q Now that sounds like a safety concern.  
23 Maybe, it's an operational concern?

24 A That is -- was a safety concern, yes, though  
25 not being engineers, hydraulic engineers in that, you

1 know, it's a theory.

2 You know, we trusted the engineers to know  
3 what they're doing.

4 Q And the concerns associated with the flow  
5 switches, whatever, for the individual relief valves,  
6 is that a concern that was expressed prior to the  
7 accident, that you recall?

8 A Well, yeah, as we experienced them, we would  
9 report them as being questionable, yes.

10 MR. TIEKEN: Now could you clarify that  
11 question, Allen, please?

12 INVESTIGATOR BESHORE: Well, my understanding  
13 is that the switch, the flow switch into tank 209, is  
14 triggered by two different scenarios, not necessarily  
15 just...

16 MR. TIEKEN: That is true.

17 INVESTIGATOR BESHORE: So I thought that was  
18 the concern you were talking about earlier. So that's  
19 kind of why there was -- were you talking about that  
20 same concern being expressed prior to the accident?

21 MR. TIEKEN: That's part of it, yes. But,  
22 the fact that we had a single flow switch that would  
23 give us a surge relief indication, in reality, there  
24 were maybe eight relief devices that could be  
25 responsible for the flow.

1                   Only having a single indication, you know,  
2                   didn't make sense from a diagnosis position. You know,  
3                   who's relieving where.

4                   BY MR. BESHORE:

5                   Q        So that's a little different issue.

6                   A        And, yes, now that you brought that up, for  
7                   me, it wasn't a concern if -- well, it was a concern if  
8                   the sump pump was running, yes. It would show surge  
9                   relief. And if we did, indeed, have a surge then, it  
10                  would be masked.

11                  You know, that's another perspective to it.

12                  Q        Now, in terms of people or in terms of  
13                  training as far as what you all needed to do  
14                  differently for training the controllers on the  
15                  specific aspects associated with Bay View terminal, did  
16                  you receive any?

17                  A        A lot of it was just like our on-the-job  
18                  training. Nothing -- I guess I should say no  
19                  structured training.

20                  Q        I guess I'm wondering, given these concerns  
21                  about proximity...anybody could come in and say you can  
22                  avoid, or if you do these things, then you have a  
23                  better chance of this valve coming in here to Bay View  
24                  not closing on you.

25                  Or was that just totally left for you guys to

1 figure out from experience?

2 A Well, and you almost have to do that. That's  
3 pretty much how it played out. As we would use the  
4 facility and learn from it, we would share this  
5 information with one another. You know.

6 And the intent of my supervisor, Ron Brenson,  
7 his whole intent -- and I support him in that -- was to  
8 -- I'll use the term. I've used it before -- to use  
9 the facility in baby steps.

10 You know, we know what it says it will do on  
11 paper. We know what it's supposed to do. But, until  
12 we actually use it and can understand exactly what it  
13 does and how it does it in reality, it's difficult to  
14 sit here and say what it will or will not do, unless  
15 you gain that actual experience.

16 And that was really the intent, was to never  
17 operate it at a higher level than we felt confident and  
18 comfortable.

19 Q The concern was I guess the general feeling  
20 that these were design problems, design issues?

21 A Could you be more specific, Allen? I don't  
22 follow you.

23 Q Well, I guess I mean the concerns that we're  
24 talking about in terms of placement of sensors on  
25 individual relief valves, the way the station is

1 configured with 300 pound piping.

2 I mean these are all design issues; correct?

3 A They are. They are. They are design issues.

4 And, you know, that's the way we got it from the

5 engineering firm.

6 Q Now when you were operating and the situation  
7 occurred at the inlet valve to Bay View isolated ~~heater~~ *heater*  
8 section on the 20 or the 16 and basically the system  
9 went down, would you consider that to be an abnormal  
10 operation?

11 A Yes, I would.

12 Q Do you recall did you generate whatever  
13 paperwork was necessary, or was there any paperwork  
14 necessary to document that abnormal operation?

15 A Generally, it was documented by email to our  
16 supervisor.

17 Q Do you remember generating an email  
18 concerning this specific type of event to your  
19 supervisor?

20 A Yes, I do.

21 Q Did you fill out an outage report or anything  
22 like that?

23 A No, sir.

24 Q Would it have been more than one email  
25 concerning the inlet valve closing?

1 A Yes, sir.

2 Q Do you have copies of those emails?

3 A I don't.

4 INVESTIGATOR BESHORE: Okay, did I ask you  
5 about an outage log? I think I just did.

6 MR. TIEKEN: Yes.

7 INVESTIGATOR BESHORE: I was thinking ahead.  
8 I'm sorry.

9 BY MR. BESHORE:

10 Q How about O&M procedures? Were the O&M  
11 procedures updated to reflect the Bay View facility  
12 being on line?

13 A Yes. Not -- somewhat. I can't recall  
14 exactly, you know, what the procedures were at that  
15 point in time in the manual. I don't know.

16 Q Do you recall if anybody came around and  
17 said, you know, we've revised the O&M account for the  
18 new Bay View station and, you know, went through any  
19 changes with you?

20 A I don't recall that, no. I do recall the  
21 topic and I do recall it being a work in progress.

22 Q The procedures.

23 A The procedures, yes.

24 Q Now were you assigned any role in developing  
25 those procedures?

1           A       I was not.

2           Q       Did you have any role or responsibility for  
3 training others?

4           A       Just what I took upon myself in the process  
5 of building the screens, the displays, and having to  
6 plot those schematics, you know, on to displays and  
7 things.

8                   I would say I became pretty familiar with the  
9 equipment on hand. And every chance I got, yes, I  
10 tried to help the fellows understand what the operation  
11 entailed and the pieces of equipment involved, and so  
12 on and so forth.

13          Q       Okay, so you would walk them through the new  
14 screens if they had any questions.

15          A       You bet.

16          Q       It was kind of an informal role for you but  
17 it was --

18          A       Yeah, and the screens were there and we  
19 pushed them to use them, become familiar with them, and  
20 ask questions before they actually had to use them in a  
21 live operation.

22                   They had the opportunity to do that as well  
23 as study the schematics and become familiar with the  
24 facility.

25          Q       All right, let's talk a little bit, if we

1 could, Lloyd, about -- while we're on the subject and  
2 before we get off the subject of O&M procedures, in  
3 1999, early in '99, reportedly, the O&M manual was  
4 revised in a pretty broad fashion prior to an OPS  
5 audit.

6 Do you recall the manual being revised or  
7 reissued or anything like that in that point in time?

8 A I recall the manual being converted from  
9 basically hard copy to digital. And accessible via  
10 Intranet.

11 That's the milestone that I remember. But I  
12 don't recall any specific, you know, revisions to it.  
13 It was pretty much just take the existing manual and  
14 convert it to digital format just through manual data  
15 entry.

16 Q Do you recall when that was?

17 A Like -- not specifically, but early 1999  
18 maybe. You know, not specifically. I really don't  
19 know.

20 Q Okay. But, at that point in time, your  
21 recollection is it basically all of a sudden became  
22 electronic and available through that format, not  
23 necessarily that there were a lot of revisions to it?

24 A That is correct, yes.

25 Q And did anybody, you know, express to you



1 that there had been changes or come around and say  
2 "We've revised the manual and these are some of the  
3 highlights"?

4 A No.

5 Q Okay, now let's --

6 A I do recall some hard copy updates to the  
7 manual. No, that was our -- never mind. That was our  
8 spill response plans I believe I was updating then.

9 Q When were those done?

10 A I don't know. In '99.

11 Q Sometime in '99 before the accident?

12 A Sometime in '99, yes. They were constantly  
13 being changed, you know, and it was not just revisions  
14 to the procedures or anything; just basically title  
15 changes and things.

16 We've been through quite a few different  
17 people there. Contractors are constantly changing, you  
18 know, things like that.

19 Q Let's talk a little bit about the specific  
20 day of the accident. When did you come into work on  
21 June 10?

22 A Around 6:30 or 7.

23 Q Is that your normal start time?

24 A Yes.

25 Q Let's start at the beginning of the day. If

1 you can, just kind of walk through us what you recall  
2 from that morning?

3 A Just for me it was business as usual. I had  
4 taken on other -- you know, I'm very interested in  
5 computer electronics and things, and computer science.  
6 And I took it upon myself to learn as much as I could.

7 So my routine was to come in and check the  
8 health of the <sup>SCADA</sup> SCATA machines and change out the backup  
9 volumes on the tape drives. And, basically, just look  
10 the system, make sure that it's healthy in as many  
11 respects as I could recognize.

12 And then that's what I did. And then I went  
13 on. I had numerous -- you know, as special assignment,  
14 it's really difficult to go in and just be, you know,  
15 just do screens.

16 So I would do different things. I would  
17 study on the <sup>A</sup> SCATA system, try to be learning an aspect  
18 of it. Work with Todd on things he was doing in the  
19 database, you know, brainstorm ideas for database work.  
20 Ideas for, you know, PLC programming, just anything and  
21 everything that we could get in and do.

22 But, primarily, this day it was come in at 7,  
23 do my health checks on the <sup>A</sup> SCATA system, change out,  
24 manage the backup archive tapes. And then get to work  
25 on the displays that I had been working on.

1 Q And that's what you were doing this morning?

2 A That's what I was doing this morning.

3 Q Nothing unusual at all at that point in time  
4 in the morning?

5 A No, sir.

6 Q All right, let's just go on then from there.  
7 What did you do next?

8 A Pretty much just that. I believe at one  
9 point in time I had walked past my supervisor's office  
10 and kind of gave him a verbal rundown on my plans for  
11 the day, just out of courtesy.

12 And Todd mentioned to me that he was leaving  
13 somewhere around lunchtime. I believe he had a  
14 function to go see his daughter perform in, or do  
15 something like that.

16 And at some point in time there, my  
17 supervisor asked me if I would create some historical  
18 data containers for our Olympic Junction pump units.

19 Q Okay, so Ron Brenson<sup>t</sup><sub>n</sub> asked you to create  
20 these containers so that they could archive some data  
21 from those points, to look at later, I guess?

22 A Yes.

23 Q But it was at his direction that you did  
24 this?

25 A Yes, sir, at his request.

1 Q Okay, so you went about this process then?

2 Can you just explain a little bit the process  
3 of doing that, if you could?

4 A It's pretty straightforward. It's utility  
5 and template-driven. There is a utility within the  
6 vector program called VBCS, which is an acronym for  
7 Vector Data Base Configuration System.

8 And you just drill down to the data base you  
9 want to create a record for and there is a fill-in-the-  
10 blanks template that you do this with.

11 I had the luxury of being able to take a  
12 similar record and display it directly above, two  
13 windows. It's like a Windows environment where you  
14 could ~~tie~~<sup>tile</sup> a windows one above the other.

15 And that was my routine. I would ~~tie~~<sup>tile</sup> one  
16 above the other, use it as a template and basically  
17 fill in the blanks and change the information where  
18 necessary.

19 Q Okay, so you could pull up another data point  
20 that already had this set up?

21 A An identical --

22 Q Just do the same thing --

23 A Yes.

24 Q -- to create this new contingent?

25 A Yes, and I had done it before.

1 Q Now what time was that, approximately?

2 A At that point in time, I believe I was  
3 getting started on that around 1500, 3 p.m., a little  
4 bit before that. Something like that.

5 Q Then what happened after that?

6 A After that, I did my routine of checking the  
7 SCADA system for errors. And things appeared to be  
8 fine initially.

9 Then, on checking it a little bit later -- I  
10 don't know. It may have been as many as ten minutes,  
11 you know, I checked it again. And it started showing  
12 that it was having trouble with the historical data  
13 base.

14 At that point in time, I started wondering if  
15 I had made an error in the records I created, so I  
16 opened them up again. Actually, I had the one open  
17 that I used for a template and just reopened the one I  
18 had created.

19 A total of three times. I triple-checked my  
20 work. And there was nothing out of the ordinary with  
21 it. So I felt confident my work was done right in that  
22 these errors being generated were, I guess, after the  
23 fact.

24 There are times when what appear to be brief  
25 windows, you know, be it 30 seconds to us, where there

1 might be some exposure to a computer but yet it's  
2 ticking off errors at the rate of milliseconds, you  
3 know.

4 So it's generating thousands of errors in  
5 what we see as maybe a 10-20 second exposure time  
6 frame. And sometimes they just cycle through.

7 And the machine, you know, at that brief  
8 point in time saw something it didn't like and then it  
9 finishes digesting and reporting and then it's okay.

10 So I saw that. I triple-checked my work. I  
11 felt confident it was fine. And I believe I took a  
12 break or went and got a cup of coffee or went to the  
13 other side or something, and came back into the  
14 computer room.

15 When I came back into the computer room, I  
16 sat down at the terminal. This was approximately 3:30,  
17 something like that. Sat down and, you know, hit the  
18 keyboard on this terminal that was hosted by the main  
19 frame computer that was on line, the primary.

20 I believe it was <sup>OLY 02</sup>~~OLEO~~2 at that point in  
21 time. And it was unresponsive. And almost  
22 simultaneous to that is when Ron ~~Burke~~ stuck his head  
23 in the door and said, "Hey, the computer is slowing  
24 down and it's not reacting."

25 At that point in time, I did everything I

1 knew to do to give them a functional SCATA computer.

2 A standard fallback routine is if anything is  
3 suspect, you know, in the computer world, you delete  
4 it. You know. And I was aware that the only change  
5 that had happened to that machine were those historical  
6 archives that I had created.

7 So I went in and deleted them. Well, no, let  
8 me rephrase that. I tried to go into the on-line, the  
9 main frame computer that was primary, and I could not  
10 get access. It was tied up in a little -- I could not  
11 get priority to work within that computer system.

12 So I went to the secondary computer, which is  
13 kind of mirrored and -- well, it's not mirrored. It is  
14 a redundant hot backup.

15 I was able to get into the data base there  
16 and delete the records, or so I thought, the records  
17 there. And that was my plan of attack was to eliminate  
18 the offender, the only offender that I was aware of,  
19 the only thing that had changed, and then fail over to  
20 the secondary machine.

21 In this case, the secondary machine was the  
22 No. 1 machine. And that's what I did. I could not do  
23 an orderly fail-over because the primary was  
24 nonresponsive.

25 So, when I deleted the two records out of

1 real time memory on the secondary machine, I was forced  
2 to do the only thing I knew to do, and that was halt  
3 the CPU on ~~OLEO-2~~<sup>04/2</sup> machine, which was in primary role.

4 Okay. At that point in time, 2 did halt and  
5 1 was functioning somewhat. You know, I can't -- it  
6 wasn't healthy. There were some points that appeared  
7 to be polling and scanning. But it was by no means  
8 healthy and alive.

9 Realizing and wanting to make sure I had  
10 something for backup, I had, after I halted 1, I  
11 immediately began rebooting number one. So I had yet  
12 another machine that was coming back up live to try to  
13 fail 2.

14 And that's what happened. Just prior to ~~2~~<sup>out</sup>  
15 starting up doing it's final startup queue, I halted --  
16 or 2 coming back as primary, I halted No. 1 and 2 came  
17 back primary, and we regained SCA/A<sup>D</sup> supervision over  
18 the system.

19 And just shortly after that happened, my  
20 supervisor, Ron Bren<sup>t</sup>son, came in the computer room and  
21 I outlined what had transpired and all of my actions,  
22 and so on.

23 After I gave him a rundown of this, he  
24 quickly jumped on line, and I believe he recognized  
25 that even though I had deleted the two records from the



1 secondary machine, that <sup>them</sup> ~~there~~ would still be mirrored <sup>in mirrored</sup>  
2 over. ^

3 It's like deleted and the primary would still  
4 have the potential of shadowing it over in this primary  
5 redundant role. And the records still did exist.

6 And he went ahead and took note that there  
7 was actually a typo displayed now in one of these  
8 fields. And he deleted that.

9 You know, and this was after the machine -- I  
10 believe timingwise the machine was up and running and  
11 we -- and things in the control center appeared to be  
12 working normally once again.

13 And that was pretty much what I was tuned in  
14 on. The duration was approximately 30 minutes,  
15 something like that, from start to finish.

16 Q Okay, I have a couple of kind of layman type  
17 questions. We'll probably go through this in a little  
18 bit more detail in a few minutes, but my questions are  
19 fairly simple.

20 When you say you first tried to get in on the  
21 OLEO-2 computer when you came back from your break, had  
22 your coffee and you came back, and you said you sat  
23 down at the screen and you noticed that it was  
24 unresponsive.

25 A Yes. I had attempted to invoke the error-

1 checking utility and a response never came back.

2 Q Now were you in the Vector program, or is  
3 this in the overall computer operating system?

4 A It's an overall -- what happens is you open  
5 what's called a terminal session. And you can do that  
6 from any workstation that, you know, has granted  
7 access.

8 You can log on and have a session going. And  
9 that's what I was doing. The session was being  
10 generated and managed by the operating system on that  
11 ~~D~~SCATA host computer.

12 It wasn't, per se, specifically the ~~D~~SCATA  
13 thing. The ~~D~~SCATA system basically had its own -- it  
14 does. It's configured, it runs on its own disk with  
15 the operating system on its own disk. They're  
16 separate.

17 Though, in its entirety, this place is shared  
18 by all.

19 Q Okay. Yes, I guess I was wondering if you  
20 were looking at ~~D~~SCATA information in the Vector or if  
21 you were looking at the basic computer itself.

22 A No, I was looking at -- I had just a black  
23 screen and I was using a utility that just goes out and  
24 says "Report the software, the ~~D~~SCATA's software's  
25 health." It's a utility.

1 Q And that program didn't function?

2 A It did not respond.

3 Q And then so you -- well, I'll just leave off  
4 on my questions and we'll go through that in a little  
5 bit more technical detail here.

6 Let me just kind of skip back on then to at  
7 that point, well, what caused Ron to come in, Ron  
8 Brenson, to come into the room?

9 Did he just happen to come by?

10 A No. He had been voice-paged over the  
11 intercom. I don't know that he had been but I'm  
12 assuming that he had been paged. You know, paged with  
13 his belt pager.

14 I'm sure the controllers were attempting to  
15 communicate with him, but I don't know that for a fact  
16 because I wasn't in there.

17 And he did come right to the computer room,  
18 you know. So he must have got the information  
19 somewhere.

20 Q Did you page him to the -- I mean did you  
21 page him on the voice phone to the computer room? Or  
22 did you ask somebody to --

23 A Yes. When I did the intercom throughout the  
24 local buildings, I asked that he come to the computer  
25 room.

1 Q But you didn't issue a page to his pager?

2 A I may have. I don't believe so though  
3 because I was intent on getting the computer running.

4 Q Okay. But, in any event, he showed up.

5 A In any event, he showed up, yes, sir.

6 Q How about Todd? Did you call Todd?

7 A I believe Todd was paged. And I'm pretty  
8 sure I paged Todd to get his assistance with this. And  
9 he responded. But it was, you know, after I had gotten  
10 2 back as primary successfully.

11 Q Okay, was it after then also you and Ron had  
12 gone in and deleted these other additional records or  
13 whatever that --

14 A Yes, sir.

15 Q Okay, so Todd got called subsequent to that?

16 A Yes, sir.

17 Q And you went through the scenario with him.  
18 Did he understand what your problem had been?

19 A No, I don't believe it's ever been  
20 understood.

21 Q And you had never experienced this problem  
22 ever before?

23 A No, sir.

24 Q All right. So then were you and Ron still  
25 together then in the computer room when Todd called in?

1 A Yes, we were.

2 Q And then how about after your communication  
3 conversation with Todd? Was Ron there for the duration  
4 of the conversation?

5 A He was. And one other issue was showing up  
6 on 2 after reboot. And it was nothing. You know, it  
7 was deemed of real insignificance. It was a formatting  
8 issue in the reporting back format where there were  
9 additional lines in the reporting.

10 And it was just a matter of Todd doing  
11 starting and stopping and restarting the process that  
12 made those, you know, made that report come back in its  
13 proper form.

14 And Ron was there for that. And, really,  
15 that's all. I gave Todd a rundown. And I believe he  
16 was headed on his way back in anyway. It's pretty  
17 difficult to talk about that over the phone.

18 Q At any time during this sequence of events,  
19 did you look at the SCATA information by chance to see  
20 what was happening out on the pipeline? Or were you  
21 specifically looking at computer data?

22 A I was tunneled in on the computer data. I  
23 did not specifically look at the pipeline. I did pass  
24 through the control center after I failed -- halted 2  
25 and went to 1 because there's a duration where the

1 network connectivity is lost and then the  
2 re-connectivity happens.

3 And then, you know, you're in the control  
4 center and you're making sure the displays come up.

5 Well, I did that. I passed through behind  
6 the controllers and saw that the screens, you know, the  
7 connectivity was there. But that's as far as it went.

8 I wasn't really even thinking about the  
9 operation of the system.

10 Q Now was that when ~~OLEC~~<sup>OLY 1</sup> was trying to  
11 operate?

12 A That was right about mid-point through that  
13 thirty-minute. I would say roughly twelve to fifteen  
14 minutes through that thirty-minute time frame is when  
15 that happened.

16 Actually, no, it might have been sooner than  
17 that. Maybe, ten minutes into it.

18 Q But, based on your glancing at I guess or  
19 looking at the monitors in the control center, could  
20 you tell anything about the functionality of the system  
21 at that point based on that observation?

22 A I could tell that it wasn't healthy and that  
23 some of the points appeared to be returning data. Some  
24 of the points didn't.

25 That's what I could tell.

1 Q And you were able, I guess -- well, let me  
2 ask one more quick question on this, and then I'll let  
3 somebody else ask most of these questions.

4 You were able to run the diagnostic at that  
5 point, right, on the ~~OLEO-1~~<sup>OLY-1</sup> system? You said there was  
6 a diagnostic tool that was to check the health of the  
7 system.

8 And you were able to run it on the OLEO-1  
9 machine in this interim period; is that correct?

10 A No, sir, I never ran it on the 1 machine.  
11 The 1 machine didn't appear to be functioning properly  
12 to me. It didn't appear to be failed, but it didn't  
13 appear to be functioning properly.

14 So then I was pretty much relegated to a  
15 series of command line routines to ensure that 2, yo  
16 know, logging in date and time, booting up the  
17 secondary machine, which boot up at that point in time  
18 on that machine was -- boot up alone was in the  
19 neighborhood of thirteen minutes plus. Something like  
20 that.

21 And during this, you know, you're prompted  
22 for information: what type of file transfers, date and  
23 time, you know, things like that.

24 Q Okay, so I must have misunderstood. So you  
25 did run that diagnostic tool then back when OLEO-2 came

1 back on line at the end -- after the two failovers, I  
2 guess, basically. ~~OLEO 2~~<sup>OLY 1</sup> was back to primary machine.

3 And then you ran this diagnostic tool?

4 A Yes, 2 was back to primary. I had gone out  
5 and passed through the control center, saw that things  
6 appeared to be getting back on track, and then went  
7 back in.

8 And, you know, to be honest with you, I could  
9 be mistaken as to whether I ran that diagnostic or not.  
10 But I'm sure I did. I'm sure I did because of the  
11 formatting of the reporting was off.

12 Q And then let's just go on and we'll maybe a  
13 little further on the computer issues here in a few  
14 minutes. But let's just go on then to the sequence of  
15 events after that.

16 You and Ron were together still in the  
17 computer room? Is that correct?

18 A Yes.

19 Q And then what happened?

20 A He and I engaged in a conversation for  
21 duration. I'm going to say roughly a half an hour.  
22 You know, we share similar likes and interests.

23 And, you know, we bounced off this, you know,  
24 just basically different ideas and just kind of talked.  
25 And then headed out of the computer room.



1                   And on our way out of the computer room at  
2                   that point in time -- no, prior to heading out of the  
3                   computer room -- I want to say somewhere around 4, 4 or  
4                   4:10; maybe something like that -- Kevin Divig had come  
5                   in and asked if it's okay to restart the pipeline  
6                   system.

7                   At that point in time, I told Kevin that,  
8                   yes, from a computer perspective, things appear to be  
9                   stable and functioning properly. We've got, you know,  
10                  approximately ten minutes of stable activity, you know:  
11                  Do things look right on your pipeline system?

12                  I didn't ask him that. But, that's I guess  
13                  we assume that.

14                  And then Ron replied that, yes, it was okay.  
15                  Whether that was verbal or a nodding of the head or  
16                  what, I don't remember.

17                  Q        Was there any conversation as to why the line  
18                  was down?

19                  A        At that point in time, no.

20                  Q        Okay. So Kevin just basically said, "The  
21                  line's down, I need to restart it"? Okay?

22                  A        Yes, that was what I witnessed.

23                  Q        Do you know if Ron Brenson had been in there  
24                  in the control room before he came into the computer  
25                  room?

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Dept. ~	Phone # 425-235-7736	
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include to you ....

A I may have. I may have. I seem to recall something. I'm not sure though that -- and, you know, that's wrong. I mean, if there's something going on in the pipeline, he pretty much knows it. I'm sure he knew what was going on.

You know, I could tell you that just from experience, that if there was ever anything going on, he knew about it. And he knew, you know, who was on duty and who, you know, was doing what.

Q Okay. But, in this brief conversation, there were no specifics about the status of anything other than "the pipeline's down and cannot be started" that you recall?

A Yes, that's correct.

Q Then what happened at that point?

A At that point, that's when we kind of started our, or continued on our talking about things. And Kevin went back and started up the system.

Shortly after that, roughly, fifteen or twenty minutes, Ron and I were kind of working our way out of the computer room. And Kevin, you know, rushed out of the control center and said to Ron:

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1                    "We've got a report of a large volume of  
2                    gasoline from Rick ~~Keeny~~<sup>KIENE</sup> in Watkin Creek." And that  
3                    Ferndale had been shut down already and the block  
4                    valves were closed at 7 and 12, I believe it was -- or  
5                    7 and 16, I think.

6                    And then we pretty much -- I'm not sure what  
7                    happened then other than me sitting down and starting  
8                    to assist any way I could in keeping a phone log,  
9                    trying to help make phone calls, notify people, things  
10                   like that.

11                  Q                  Okay, so did you and Ron Brenson<sup>+</sup> then follow  
12                  Kevin into the control room to find out more?

13                  A                  Yes.

14                  Q                  And attached to your deposition, there was  
15                  two pages of handwritten notes that we had been  
16                  provided previously. Is that the log you're referring  
17                  to that you generated?

18                  A                  They weren't all generated by me. Some of  
19                  the first entries were entries that were preexisting,  
20                  and I wanted to combine all of them on a document that  
21                  I was managing.

22                                  So that's -- the first few of them weren't my  
23                                  specific, just a copy over.

24                  Q                  But, that overall document that we've been  
25                  produced at ~~Quin~~<sup>7</sup> was basically produced then by you?

1 A Yes.

2 Q During this --?

3 A During that accident, yes, sir.

4 Q When you and Ron went back into the control  
5 room and you were helping out, do you remember what did  
6 you do specifically at that point?

7 Did you make phone calls? Did you look at  
8 the computer? What did you do?

9 A I pretty much, since I had not been running  
10 the pipeline or knew where any of the people were and  
11 we had two controllers that were senior to me in there  
12 working it, I did the phone calls. That was pretty  
13 much all I did.

14 I don't recall anything else other than maybe  
15 creating a form for tracking contractors for one of the  
16 supervisors. I think I did that.

17 And that's it.

18 Q Okay, did you look at any pressure trends?

19 A I do -- actually, I did do a little bit of  
20 pressure trending but, you know, it wasn't anything  
21 that I was real successful at and felt good about the  
22 results, that it was publishable.

23 And I believe also I think Brenson told me he  
24 had been working on some of those. I'm not clear on  
25 that. But, for whatever reason, it's something I

1 didn't follow through on and take ownership of.

2 It's fairly, a process of building trends is  
3 fairly intensive. And I kept getting pulled away from  
4 it and doing other things and just didn't -- didn't see  
5 any sense in continuing to try to do something that  
6 somebody else was already working on.

7 Q Well, based on the trends that you were able  
8 to access, did you draw any impressions?

9 I'm not talking publishable. I'm just  
10 talking to you as a controller accessing this  
11 information. Did anything stand out in your mind that  
12 you saw?

13 A No.

14 Q Do you remember what trends you looked at?

15 A Not specifically, no.

16 Q You didn't print any?

17 A I would have, I mean I would have been  
18 trending the affected section, the discharge, you know,  
19 control of suction at Ferndale, the incoming pressure  
20 at Bay View, you know, things like that is I believe  
21 what I was trying to do.

22 But, you can trend them for any time  
23 duration. And like I say, it's very tedious to get all  
24 three of them overlapping, you know, to where you're  
25 happy with the results and want to print it.

1                   And, no, I did not print it. Well, I may  
2                   have printed it and then tossed it. I didn't keep  
3                   track of it.

4                   Q        But you don't have any reaction or  
5                   recollection of what you saw?

6                   A        Well, no, I don't. You know, if you're  
7                   asking me if something looked horribly wrong based on  
8                   those trends, no.

9                   Q        I'm asking you if something stands out now--

10                  A        If something stands out? No.

11                  Q        -- and your recollection based on what you  
12                  were doing, what you saw.

13                  A        No. Not at all.

14                  Q        Okay. Then do you remember -- I know you  
15                  said you were making the phone calls. Do you recall  
16                  did you make notifications to every agency, or is that  
17                  something that the supervisor did?

18                  A        Yes, that was relegated up the incident  
19                  command structure; primarily, Ron Brenson would take  
20                  care of that as well as the rest of the structure above  
21                  us.

22                  Q        So you're making phone calls generally to  
23                  internal Olympic people to mobilize your own team  
24                  members in your group?

25                  A        Yes, sir. Yes, sir. Informational in

1 nature. You know, let people know that we've got a  
2 major situation here and that we may need you, things  
3 like that.

4 I did -- I received a call from Rick Keeny,  
5 too, when the creek caught fire. Let me see where that  
6 call was. That's one I'll never forget.

7 Q Were you actually talking to him on the phone  
8 when the ignition occurred?

9 A Yeah. Yeah.

10 Q And I'm sure he was pretty shook up?

11 A Yeah. Yeah, he was. You know, we all...

12 Q Okay. We talked a little bit about Ron. As  
13 a manager, what kind of a management style would you  
14 say that Ron had?

15 A His style is very easy-going, easy to talk  
16 to. I was on good, very good rapport with Ron. I  
17 think he respected me and I respected him -- and I  
18 still do.

19 I think he -- I think he had too much to do.  
20 I think the Equilon structure filled his plate up too  
21 much to do. So, a prioritization with him -- and this  
22 is my perception, my... I believe prioritization for  
23 him was an issue.

24 But, as far as him as a manager, in my  
25 perspective, he's one of the best I've ever worked for.

1 Q Do you have any kind of a sense for how he  
2 got along with Frank ~~Huff~~<sup>Hoff</sup>?

3 A Yeah. Yeah, they were at odds on issues. I  
4 can't tell you specific issues but I do know that  
5 issues that were important to us in the control center  
6 were not issues to Frank. I do know that.

7 Q And you felt like Ron would -- Brenson --  
8 would strongly express the concerns of the control  
9 center and represent those concerns to Frank?

10 A I assume that.

11 Q That was your impression of --

12 A Yeah, you bet ya.

13 Q -- him as a supervisor?

14 A Yes.

15 INVESTIGATOR BESHORE: All right. Well, I  
16 think I'm going to go on and see if Cliff has any  
17 questions.

18 MR. ZIMMERMAN: Can we have a break for a  
19 minute?

20 INVESTIGATOR BESHORE: Yes, let's break.  
21 Okay, I'm sorry. Yes, please.

22 (Recess.)

23 INVESTIGATOR BESHORE: Cliff had a few  
24 questions.

25 BY MR. ZIMMERMAN:



1 Q Good afternoon.

2 A Hello.

3 Q Could you tell me what Olympic's policy was  
4 regarding whether where there was a commission, that  
5 could be a possible leak? What were you supposed to  
6 do?

7 A Minimize loss and shut the system down. You  
8 know, shut the system down in a manner to minimize loss  
9 and get people mobilized to deal with it.

10 Notify their immediate supervisors, and  
11 respond.

12 Q Okay. In reality, how do you go about  
13 complying with that policy when you have a potential  
14 leak but you don't know if it's a leak?

15 You have some system indications that you  
16 have a leak.

17 A I don't quite understand the question. If  
18 you don't know you have a leak, you wouldn't be  
19 inclined to do any kind of a response.

20 Q Okay, let me back up then.

21 On your system, do you have leak indications?

22 A We have a leak detection computational model  
23 that can declare a leak, yes.

24 Q And are those declarations always accurate?  
25 Is there always a leak?

1           A       Not that I'm aware of. You know, we haven't  
2 really tested it out, to be honest with you. I mean we  
3 believe in it. We believe it to be accurate.

4           Q       So, when you do get a leak declaration and  
5 you believe it to be accurate, what actions do you  
6 take?

7           A       As I outlined before, you would shut down in  
8 the manner that reduces, you know, product loss for  
9 whatever you deem to be the suspect site, and isolate  
10 it. Notify it.

11          Q       In the incident that happened on June 10, did  
12 we have a leak declaration?

13          A       I believe the leak detection system did issue  
14 an order, yes.

15          Q       Because of the computer problems, do you know  
16 whether the controller received that declaration?

17          A       I don't know.

18                   I believe one was logged. I know one was  
19 logged and issued. But, you know, since I wasn't in  
20 the control room, I have no knowledge other than that.

21          Q       Tell me a little bit about the leak detection  
22 software that you have that is -- I'm going to say part  
23 of your SCADA system?

24          A       I don't think that would be appropriate.  
25 It's driven -- its telemetry, it's being fed telemetry

1 by a passthrough that is the same system that hands it  
2 to the SCATA system, you know. It picks it up from the  
3 SCATA system to use for its calculations.

4 Q The data is passed through the SCATA system  
5 to the leak detection software? It doesn't just go  
6 there?

7 A You know, I'm not real expert on the exact  
8 data flow or path. I know that the leak detection  
9 model gives its information the same way SCATA gives  
10 its information. And where in the data flow that  
11 occurs, I can't sit here and tell you that.

12 Q Have you ever seen a copy of API Standard  
13 1130 regarding leak detection requirements?

14 A I may have.

15 Q You may have? You're just not sure?

16 A Correct, I'm not sure.

17 Q You're not sure if you ever read that?

18 There's a number of details in that standard if you do  
19 have leak protection system that are required then, DOT  
20 regulations.

21 And that's where my question came from. Have  
22 you ever seen that... want to use that standard?

23 A A lot of information is passed to and through  
24 our control center. That may have been a document that  
25 I read and perused, but it wasn't a document that I

1 used in my every day job or was responsible for any  
2 type of compliance.

3 And I wasn't part of any team that said,  
4 okay, this model has to comply with these regulations.

5 So I might have read it and digested it and  
6 forgot.

7 Q And this regulation went into effect  
8 recently. The standards have been prepared for a while  
9 but it was not the part that... mentioned...

10 I was just again trying to find out if you  
11 had any familiarity.

12 A Yes, I knew that there was, you know, coming  
13 down the pike was -- I was aware that there was a  
14 regulation for a leak detection system.

15 But, when that would be forced, you know,  
16 that's...

17 MR. ZIMMERMAN: Thank you. That's all I  
18 have.

19 INVESTIGATOR BESHORE: Geoff?

20 MR. SMYTH: I don't have anything.

21 INVESTIGATOR BESHORE: Johnny?

22 MR. PARRISH: I don't have anything.

23 INVESTIGATOR BESHORE: Dione?

24 BY MS. MAZZOLINI:

25 Q Were you at all involved in helping try to

1 determine the amount of product that was lost?

2 A No, I was not.

3 BY MR. KATCHMARE:

4 Q Hi, Lloyd.

5 A couple of things on confirming what you had  
6 told Allen to some of his questions. When you were  
7 talking about Ron Brenson, your supervisor, you said  
8 that as an afterthought that you thought he may have  
9 too much to do; they relied on him heavily, his  
10 workload.

11 When did that start? Had he always had too  
12 much to do?

13 A You know, I don't know. At that point in  
14 time, or in now, I've only been with the company for  
15 six years. I'm really quite junior to the company  
16 compared to the other employees.

17 But, part of that would be answered by my  
18 perception of what was too much.

19 I would say my perception of thinking that he  
20 had too much to deal with or too many responsibilities,  
21 I would say probably manifested around '97.

22 I would say something like that, as early as  
23 '97.

24 Q And what occurred in '97 that you think may  
25 have put too much on his plate?

1           A        I can't say anything specifically other than  
2           just, you know, "Oh, you do that, too? You do that,  
3           too? You do that, too? You do that, too?"

4           Q        Okay. Was Mr. Brenson<sup>t</sup><sub>^</sub> available to you as  
5           much as you needed him to be available to you?

6           A        Yes. Yes.

7           Q        For the whole five, six year tenure there?

8           A        Yes.

9           Q        And his availability hadn't gone down in the  
10          past year?

11          A        No, not that I can -- no. You know, there  
12          were little things that, you know, went unaddressed.  
13          But, from a scale of priorities, they were little  
14          things, like scheduling issues and things like that.  
15          Okay?

16          Q        In discussing the computer when you failed it  
17          over and that whole scenario, you had said that  
18          actually Ron had showed up when the ~~OLE-2~~<sup>OLYØ2</sup> had come back  
19          up healthy?

20          A        Yes, sir.

21          Q        And you all went in there and looked at these  
22          finals and you found something wrong, or he found  
23          something wrong with one of them?

24          A        Yes, sir. There was what appeared to be a  
25          typo in one of the fields.

1 Q Could you explain what a typo is?

2 A An incorrect piece of data like, instead of  
3 saying "OLLEE" as OLJH, you know, NNN, it said  
4 OLJH.NNN.

5 Q Was that something that you would have  
6 entered it?

7 A No.

8 Q This is something generated by the computer?

9 A I believe it to have been. As I previously  
10 stated, I tripled check that record and felt  
11 confident -- and still feel confident -- that I did my  
12 work right. It's really -- and the reason I can say  
13 that with confidence is I don't know if you ever use  
14 patterning, but you can kind of stand back and look at  
15 a document in its entirety.

16 And if this pattern doesn't match this  
17 pattern, it jumps out at you.

18 And when you've got the windows tiled like  
19 that, a blank spot between letters jumps out.

20 Q Right. Right.

21 A And that would have happened.

22 Q I guess my question, to be more specific, was  
23 this typo in one of the blanks that you would have  
24 filled out?

25 A It was in one of the records. I believe it

1 was-- I don't know for sure but I believe it was  
2 recognized to be in one or both of the records I  
3 created.

4 Q Another question. If the computer was up and  
5 running healthy, why do you think Mr. Brenson wanted to  
6 delete that file, or did, in fact, delete those two  
7 files?

8 A Because I believe, like I had told you  
9 before, that any time the computer is running along  
10 healthy and it gets sick, well, what has changed?

11 The only thing that changed that initially  
12 made the computer sick was my creation of those  
13 historical containers.

14 And he had no reason to believe that that  
15 wasn't the case at this point in time, that it just  
16 hadn't gotten around to using those records and that it  
17 would get sick again.

18 That's an assumption on my part of what he  
19 was thinking. But I would have done the same thing,  
20 you know, had I recognized the potential for them to  
21 still exist, even after jumping through these rebooting  
22 hoops.

23 Q Good. When Ron ~~Burke~~<sup>I</sup> came out and alerted  
24 you to the fact that the computers were sluggish<sup>H</sup>, or  
25 whatever he did say to you, was Ron ~~Brenson~~<sup>I</sup> there at



1 that point?

2 A No.

3 Q Okay, did Mr. ~~Burke~~<sup>A</sup> seem excited?

4 A Not, you know, Ron very seldom seems excited.  
5 But, no, not at all. He just came in and said, "Do you  
6 realize this?" And that was simultaneous with me  
7 getting a nonresponsive command prompt.

8 So I mean we pretty much knew it as soon as  
9 it was manifest. He did mention that, you know, what  
10 Kevin had done and that there was some sense of getting  
11 this fixed.

12 Kevin had swung his line from Renton to  
13 Seattle and that the pressure was in a gradual  
14 increasing profile.

15 So, if we could, you know, the sooner the  
16 better to get control.

17 Q So Ron ~~Burke~~<sup>T</sup><sub>h</sub> had told you all that. Kevin  
18 had made his swing --

19 A He had told me that Kevin had made his swing  
20 to Seattle. That's all he told me.

21 Q Okay, and he expressed that the sooner the  
22 better, you can get this computer up and running?

23 A I can't say that he expressed that or I knew  
24 the developing scenario in my mind.

25 Q And then you paged Ron Brenson?  
<sup>+</sup>  
<sub>h</sub>

1           A       Yes.  It may have been both the intercom page  
2           as well as the alpha numeric.

3           Q       When Ron showed up in the computer room, did  
4           he say anything to where he may have known that Kevin  
5           had shut down the line, or had line shut down?  His  
6           line?

7           A       No.  I didn't give him a chance.  I just  
8           immediately wanted to, while it was fresh in my mind,  
9           go over my situation with him.  And then just in case -  
10          - you know, it was critical to me that I had taken the  
11          right steps and done the right things because I didn't  
12          want it to recur.  That was paramount in my mind.

13          Q       Let's go to -- well, let's stay there for a  
14          minute.  When Kevin came out, Ron was still with you?  
15          Ron Brenson was still with you?

16          A       At which point in time?  Kevin came out  
17          twice, the first time to ask about restarting, and the  
18          second time when he informed us of the product in  
19          Watkin Creek.

20          Q       Okay, so can you walk through --

21          A       And ron was with me for both of those.

22          Q       All right.  Well, did Ron say anything when  
23          Kevin came out and mentioned, or asked the question,  
24          "Can I restart the line?"

25          A       We were both standing side by side and I, you

1 know, I told Kevin from a healthy SCADA system side, it  
2 looked okay. And I believe Ron nodded yes in  
3 agreement, or did agree that it was okay.

4 I don't know. I can't sit here and say that,  
5 yes, I heard Ron say "yes." I don't recall. I know  
6 that sounds lame.

7 Q I understand. I'm just asking questions.

8 So was Ron curious as to why that line was  
9 down? Ron Burke's line wasn't down.

10 A I don't know. I have no idea what Ron was.  
11 Like I said, I hold him in highest esteem. He always  
12 seems to know what's going on.

13 There was no reason for me to assume any  
14 differently then that he hadn't done his homework, and  
15 he knew what was going on, you know. That would be my  
16 assumption.

17 Q Okay, but you're the one that paged him. And  
18 you just don't know if he came to you through the  
19 control room?

20 A Correct.

21 Q Because he already knew what was going on  
22 there? You have no idea?

23 A I have no idea.

24 Q But he didn't act surprised that Kevin's line  
25 had been shut down?

1 A No. Lines shut down, you know, often.

2 Q That particular line? The Ferndale, or  
3 Cherry Point to Ferndale to Bay View?

4 A No, they all do. There's a lot of pieces of  
5 equipment on them that are subject to failure. Not  
6 failure but, you know, shutdowns and things.

7 Q Have you been able to sit down and discuss  
8 with other people in Olympic what happened on June  
9 10th?

10 A Not in a formal manner, no. But, since it's  
11 happened, it's definitely been a topic. We all discuss  
12 it and such, not formally.

13 Q Do you feel like you know everything that was  
14 going on about the event from the Olympic employee  
15 perspective? All the aspects?

16 A I feel like I know enough of all of the  
17 factors involved with the accident, yes.

18 Q Have you personally ever called a refinery to  
19 stop the flow in a pipeline that you could not control?

20 A I have not.

21 Q Do you understand that that's what happened  
22 this day?

23 A I don't know what happened in the control  
24 room. I wasn't in there.

25 Q That's why I asked you the first question, if

1 you had discussed this with other people, if you had  
2 learned about all the events of this day.

3 And you haven't been told that, that somebody  
4 called maybe the refinery to shut the product off?

5 A I don't know. It might have been mentioned  
6 but whether it was actually mentioned in the context of  
7 something that was done that day, I don't know.

8 Q Let's go out to the Bay View Products  
9 terminal and the six months just after it was  
10 commissioned.

11 Do you know whether the Ferndale or the  
12 Anacortes line was commissioned through Bay View first?

13 A I want to say Ferndale, but I'm not sure.

14 Q You had mentioned when Allen had asked you--

15 A Actually, it may be Anacortes because -- no,  
16 I don't remember.

17 Q Allen had asked you about the relief valves  
18 out there?

19 A Yes.

20 Q And you had mentioned something about  
21 verbally calling a mechanic and asking them at three to  
22 five different times to check those valves?

23 A I can't say that -- I know of one time for  
24 sure that I did the verbal call. But I want to say  
25 that the valve was serviced that I'm aware of three to

1 four times.

2 Q Okay.

3 A Not me specifically asking the mechanic to  
4 fix it.

5 Q Okay, but can you go through that scenario?  
6 What I'm after is do you remember what the  
7 pressures were?

8 A Generally, it was post 700 psi shut-in. I  
9 recognized that the valves were set -- I believe they  
10 were set 50 pounds under that 700 psi threshold.

11 Now it seemed to me that they should have  
12 relieved, any time they were exposed to anything less  
13 than the 700, they should be relieving.

14 However, in real life, I've seen relief  
15 valves that you can gradually increase the pressure up  
16 above their relief set point. And if it's done  
17 gradually, it takes a percentage above what their set  
18 point is for them to actually function, especially if  
19 it's a gradual profile.

20 I explained it away to myself that that's  
21 what was going on, that they weren't getting at. I  
22 mean, once the telemetry saw 700, more than 700, the  
23 control valves are closing to protect the loop inside.

24 The reliefs are inside. And all of a sudden,  
25 we're 50 pounds over where they're supposed to be

1 relieving. And maybe they never see enough to relieve.

2 And that's, you know, because I had seen them  
3 a couple of times act, you know, close, act like they  
4 were functioning. The mechanics had checked them.

5 I felt like, when they were needed, they were  
6 going to work. I believed that they were going to work  
7 when they were needed. That the 700-pound thing was  
8 just muting that spike that was necessary to actuate  
9 them.

10 Q Now this one time that this occurred when you  
11 were on duty as a controller out there, you mentioned  
12 that the mechanics actually went out pretty much right  
13 away. And I guess the line had shut down so you had to  
14 start it back up.

15 And you said they did some kind of a flow  
16 test?

17 A You know, I can't tell you exactly what  
18 happened on any given day. But I do have the  
19 experience of a line shutting down. I do have the  
20 experience of them on several occasions calibrating and  
21 dumping the relief valves.

22 Q Do you know at what pressures they would have  
23 done that?

24 A The pressures were lower than the 700 pounds.  
25 We wanted to stay away from the high end of it. They

1 could lower the pilot down to where they're below the  
2 existing line pressure, which would allow them to  
3 function and dump.

4 And that's what they would do.

5 Q Yes, but you had to have started some flow.

6 A Yes. No, the line was flowing when they were  
7 doing this.

8 Q At what kind of a pressure would they have  
9 reduced the relief valve?

10 A Whatever I was able to run the line at  
11 comfortably and felt good about as a controller, you  
12 know.

13 Q Could you give me a figure?

14 A Three to four hundred pounds. Guesstimate.  
15 Maybe, five.

16 Q Did you ever have to call somebody out to  
17 open that isolation valve at Bay View on 1902 coming  
18 into Bay View?

19 A Isolation valve?

20 Q The motor-operated valve, inlet receiver  
21 valve.

22 A Okay, receiver inlet valve?

23 Q Yes.

24 A I believe I have, yes.

25 Q Do you know what they would have done to open



1 that valve?

2 A I believe that there was a way for them to --  
3 I believe there was a way for them to relieve the  
4 incoming pressure, or manually, you know, set the  
5 alignment to where they could reduce the incoming  
6 pressure below the 700-pound threshold so that a reset  
7 was capable?

8 And be that generally when that happens, you  
9 know, downstream goes down and the south end of the  
10 line is slacked or lower pressure. They could take  
11 things on manual and open the downstream valve and then  
12 crack the upstream valve and allow pressure to bleed  
13 off slowly through the receiver inlet valve, and on  
14 down line until it drops below that threshold.

15 Q Do you know if that was a common occurrence?

16 A I believe that, initially, we experienced  
17 some of that. But, as we got to learn and know the  
18 station, we were able to get the line shut down quickly  
19 enough and avoid that higher pressure sitting on the  
20 incoming side of the facility.

21 Therefore, the shutdown would do its thing.  
22 The valves would cycle shut and then we could reset it,  
23 and open it up and resume operation.

24 MR. KATCHMARE: Thank you, Lloyd.

25 INVESTIGATOR BESHORE: Geoff.

1 MR. SMYTH: I've just got a couple of quick  
2 questions on some training. I maybe missed it.

3 BY MR. SMYTH:

4 Q Were you trained at home station there in  
5 Renton on the SCATA system, or did you travel somewhere  
6 and receive training?

7 A For training on SCATA, it was pretty much  
8 mentor training there at Renton in a very controlled  
9 environment, and very basic stuff.

10 Q And was that taught by Olympic personnel, or  
11 the SCATA manufacturer had someone come in and train  
12 you?

13 A No, it was Todd Smith and I. And I would not  
14 attempt to do anything without buyin from Todd. And he  
15 was always there, you know, to coach me and mentor me.

16 I did have at any point in time, I had the  
17 capability of contacting Bob Deberet and Teledyne  
18 Brown, any other support there at any point in time if  
19 I felt I needed to.

20 Q Did you ever ask for like more training from  
21 the supervisors or Todd or anyone to go to Teledyne?

22 A I did, yes.

23 Q And what was their response?

24 A They allowed me to go to -- they made  
25 arrangements and I was able to go do an introductory

1 course on the newer SCATA<sup>D</sup> system, which pretty much  
2 encompasses the old one. I went to a course in Dallas.

3 And I also attended a course in Houston.  
4 Dallas was the training and, prior to that, was  
5 Huntsville, Alabama at Vector User's Exchange.

6 Q And that was all post-June 10?

7 A It was post-June 10, yes.

8 Q Okay, so before June 10, did you ask for any  
9 training to go down to Dallas, or Texas before that?

10 A I had expressed interest, but no one ever  
11 said no. I had expressed interest.

12 Q But, no one ever came forward --

13 A No one ever said --

14 Q -- and said, "Well, here's your plane ticket.  
15 You're ready to go."

16 A Yeah. You don't express interest, you know,  
17 if you don't have the talent and they just send you  
18 off. I mean there's got to be an evaluation period to  
19 show that you may -- that it's not just --

20 Q And do you know did Todd ever attend any  
21 classes from then that he would be able to teach you  
22 then?

23 A Yes. I believe Todd had been to classes.  
24 I'm sure he had been to User's Exchange. And I'm sure  
25 he had been through the introductory at the Teledyne-

1 Brown facility.

2 Q Was there a standard that you were training  
3 to?

4 A Well, not that I'm aware of, but bear in mind  
5 that the things that I was doing with SCADA<sup>D</sup> wasn't nuts  
6 and bolts stuff. I mean it's utility-driven every day  
7 stuff. I mean it wasn't anything -- there was nothing  
8 I was doing that had the potential, short of hitting  
9 the halt button on the CPU, of crippling the SCADA<sup>D</sup>  
10 system.

11 Q And I'm kind of -- just for my own knowledge  
12 here. Special assignment, is that something that --  
13 who assigns you? I mean do you get assigned that  
14 because of your interest in going towards the SCADA<sup>D</sup>?  
15 And what is a special assignment?

16 A The special assignment is just a generic  
17 label that may not even be used by -- I mean that's  
18 something I picked up with Mobile<sup>D</sup>. It may not even be  
19 used by Olympic. Just an assignment to other than what  
20 I was doing.

21 There was a need for display screens to be  
22 built for the Bay View terminal. I had shown some  
23 interest, and still do, and pretty much have learned  
24 how to maintain the displays on the system.

25 Q So it wasn't anything HR Department gave you

1 a special assignment?

2 A Correct.

3 Q Special...

4 A Correct.

5 MR. KATCHMARE: I was just curious. Okay,  
6 that's all I have.

7 INVESTIGATOR BESHORE: Linda.

8 MS. PILKE-JARVIS: Yes, just a couple, thank  
9 you.

10 BY MS. PILKE-JARVIS:

11 Q What's your understanding of the purpose in  
12 Olympic constructing a Bay View station?

13 A The intent, I believe, was to increase  
14 throughput, the capability of the tank farm and the  
15 inventory that it was able to utilize.

16 The intent was to basically increase  
17 throughput and stabilize throughput issues.

18 By utilizing tankage in a float operation,  
19 you know, we could basically be filling tankage,  
20 pumping into and out of tankage at Bay View with  
21 maintaining a head. So that if the refineries had any  
22 kind of an upset or anything like that, the pipeline  
23 continues pumping along on down the line.

24 And their upsets do not affect us. If they  
25 have turn-arounds and other things like that coming

1 down the line, we could stockpile volume there and  
2 allow them to do work without losing ~~downtime~~ <sup>throughput</sup> from down  
3 ~~line~~ <sup>time</sup>.

4 That's part of it. There are other parts of  
5 it as far as the relationship to it and our Cross-  
6 Cascades project that we have been working on. It was  
7 primarily an efficiency tool from what I understand.

8 And the ultimate goal was to increase  
9 throughput through reducing downtime.

10 Q Was the downtime from the refineries? Was it  
11 your impression that it was a little problem or a  
12 medium-sized problem or a big problem before Bay View?

13 A I don't feel, since I've been there for such  
14 a short period of time, I don't feel qualified to  
15 answer that accurately.

16 Q How does Bay View fit in with Cross-Cascades  
17 project?

18 A There would be greater demand in feeding the  
19 Cross-Cascades pipeline system. Therefore, the need,  
20 you know, for increased throughput exists.

21 Q Thank you. You worked as a controller for  
22 Mobile ~~for~~ for I think you said five years before you came  
23 to Olympic.

24 A Yes, five plus, five and a half, maybe more.

25 Q Do you have any sort of general impressions

1 about differences in being a controller for different  
2 companies and corporate culture policies?

3 A Actually, they're all very similar in their  
4 policies and their cultures, things like that. Olympic  
5 is very unique in its structure in that there are  
6 actually-- it's a tandem operation.

7 You've got two controllers side by side  
8 operating simultaneously. It's the first time I've  
9 ever been exposed to that was here.

10 That's about it. Just, the culture is pretty  
11 similar.

12 Q Do you mean when you say tandem operation, do  
13 you mean the difference was that you got to work with  
14 somebody as opposed to working alone in the control  
15 room? Is that what you mean?

16 A That is correct, yeah. All the other systems  
17 I had ever worked prior to now were a one-man console  
18 operation. I believe that's probably the industry  
19 standard.

20 Though I think networking capabilities have  
21 broadened the capability of oversight to adjacent  
22 consoles and things to monitor stand-alone systems  
23 remotely, you know, in the event this man gets hung up  
24 in the can or something, you know. Things like that.

25 Q During the time that you've worked at

1 Olympic, have you ever participated in a near-miss  
2 review?

3 A Yes.

4 Q Was that prior to June 10th?

5 A Yes.

6 Q And would you say that there was an open  
7 atmosphere at Olympic for folks to report near misses  
8 and conduct reviews and try to understand how to  
9 connect?

10 A Yes. And, though I believe it was in its  
11 infancy, you know, the near miss thing had existed in--  
12 by infancy, I mean a whole formal process being  
13 established and everyone getting on board.

14 I believe the process existed before but it  
15 wasn't nearly as formal as it was growing to become.  
16 It was open-minded and actually a good thing.

17 Q Can you recall what the circumstances of the  
18 near miss was that you participated in?

19 A I believe the one that I was involved in was  
20 a ~~ten~~-volume contamination on Seattle, at Seattle  
21 Harbor Island, where we had a line fill of gasoline,  
22 9,600 barrels that was to be pushed in, and then diesel  
23 was behind it.

24 And the receiving terminal for both the gas  
25 and the diesel were the same company. And they had



1 prealigned and were open and ready to receive both the  
2 gas and the diesel.

3 And the controller on duty aligned up to the  
4 diesel side and put gasoline, a volume of gasoline on  
5 top of a diesel fuel tank.

6 That was the one that I was actually directly  
7 involved in.

8 Q And then how was it communicated generally  
9 back to Olympic? You know, whatever resolution came  
10 out of the near miss? How was a prevention measure  
11 implemented after a near miss review?

12 A I believe at that point in time Al White had  
13 taken ownership of that process and was publishing near  
14 miss incident reviews on email. And emailing them out  
15 to everyone.

16 Q Thank you. You talked about your impression  
17 was that Ron Brenson had too much to do. Did you ever  
18 have that general impression within other areas of the  
19 company? Were there other sections that perhaps had  
20 too much to do, and too few people?

21 A My overall perception was that we were a lean  
22 organization, is that there was always way more work  
23 than employees, you know, to do it.

24 Q Just two more questions.

25 You told us that after you failed over from

1 OLE-2 to OLE-1 that you then went into the control room  
2 and looked at the screens to try to see if it was  
3 coming back up.

4 A Yes.

5 Q Did you say anything to the controllers?  
6 Anything, you know, for example, explain what was  
7 happening, or tell them that it would take a little bit  
8 more time to come up or tell them not to send commands  
9 until it came fully up?

10 A I believe that when I passed through, I  
11 mentioned that -- I let them know what I was doing, the  
12 steps I was taking, that I have halted 2. One appears  
13 to be ill. The connectivity is there.

14 And I think they may have provided me with  
15 some feedback as far as ramp a setpoint or something,  
16 and that it seemed sluggish and not like -- like it  
17 wasn't working like it should?

18 And, at that point in time, Kevin mentioned  
19 that he had had Jim Traphoffer shut down the pump at  
20 Allen Station.

21 Q I'm sorry? Could you say that again?

22 A Kevin ~~D~~ivig had had Jim ~~T~~rapphoffer, I  
23 believe, shut down a pump at Allen Station.

24 Q Kevin had Jim shut down the pump station -- a  
25 pump at Allen Station?

1 A Yes.

2 Q Jim is somebody in the field?

3 A Yes.

4 Q How would Kevin communicate to Jim?

5 A Telephone. Nextel. We have Nextel systems,  
6 which are like two-way radios, telephones.

7 Q That's just the first time that --

8 A Yeah. He didn't say that specifically to me.  
9 You know, you have a habit of kind of talking out loud  
10 when you're in the control center. It's a way of  
11 sharing information, you know.

12 And if someone's available to pitch in, they  
13 will.

14 Q Thank you. Here's my last question.

15 Have you ever, yourself, or heard of other  
16 controllers where both computers had been lost at the  
17 same time, other than this day?

18 A No. I believe this is the first time it's  
19 ever occurred.

20 Q Ever hear anybody say that the SCATA had  
21 slowed down prior to this day? Had it be unresponsive?

22 A Not specifically. There may have been some  
23 instances in the past, like years ago, that people had  
24 talked about. But I can't tell you specifically that,  
25 yes, we have seen this, you know.

1 MS. PILKE-JARVIS: Thank you.

2 MR. TIEKEN: You're welcome.

3 INVESTIGATOR BESHORE: Patti.

4 BY MS. IMHOF:

5 Q When you came to work for Olympic in 1994,  
6 were you aware of the new project that was going on at  
7 Bellingham at the water treatment plant in the same  
8 pipeline...

9 A I was not.

10 Q Was there any communication that you can  
11 share with us between the control room and the field  
12 about times when excavation was occurring, or where you  
13 needed to be performed or informed?

14 A Not that I'm aware of, no. We do have a  
15 guideline, a reporting guideline, that if the pipeline  
16 is unsupported, if it's excavated, if they're digging  
17 around it, you know, if it's close enough to where we  
18 face the risk that, you know, we're to be notified and  
19 to be aware that they're there working.

20 But, here again, I was brand-new. You know,  
21 I could very well -- I'd just been focusing on my  
22 training material and it had happened, but I have no  
23 knowledge of it.

24 MS. IMHOF: Thanks a lot.

25 MR. TIEKEN: You're welcome.

1 INVESTIGATOR BESHORE: Jim.

2 MR. TIEKEN: Hi, Jim.

3 BY MR. CASH:

4 Q In the displays when you're building ~~Big's~~<sup>7</sup>  
5 ~~Creek~~, do you -- how do you normally do that? Do you  
6 start from scratch, or do you pull one up that's sort  
7 of the same and then change the values that you need,  
8 or do you do it from scratch each time?

9 A Bay View was scratch because there was  
10 nothing else like it. But, once you have an initial  
11 schematic or templet with the points existing, you can  
12 utilize that by deleting and undeleting pieces of it to  
13 create other -- to speed up the process of creating  
14 other --

15 Q The first one is a lot of work.

16 A The first one is a lot of work.

17 Q The second one is --

18 A Yes.

19 Q Do they normally use the same nomenclature  
20 for the valves and the same nomenclature for the  
21 pressure sensors, all that stuff? Is that generally  
22 the same?

23 A It generally had been the same in the past.  
24 However, in the interest of creating a uniform data  
25 base, we decided to change that a little bit. Just in

1 point-naming is all rather than trying to name a  
2 certain -- let's say you've got a pressure transmitter  
3 here in Bay View on the 20-inch receiver.

4 In the past, it would be, okay, Renton, 20-  
5 inch receiver in the past this point would be an analog  
6 point. So the third character in would be an A for a  
7 denoting an analog data base.

8 The first three might be RTN analog, and then  
9 it would be like 20-inch RCV TMP. What we decided to  
10 do was a one on one application of the P&ID for these  
11 devices rather than trying to come up with a naming  
12 convention for each device, the P&ID drawing has  
13 instrumentation numbering on it.

14 So we utilized that for point identification.  
15 And that's really the only thing that changed.

16 Q Did you go back and change them all?

17 A Yes. The intent was to use that as a  
18 standard and work our way through the system in its  
19 entirety to where any operator, any electrician could  
20 open up the drawings and I could say, okay, I've got  
21 trouble with this pressure transmitter or temperature  
22 transmitter.

23 You say, okay, look on your drawing. It's  
24 this guy. You go out to the pipeline. That device has  
25 that label on it to where there is no confusion as to

1 exactly what device you were referring to.

2 Q So you're switching to their instrumentation  
3 people's --

4 A Well, we're basically -- we still use the  
5 BPT, the first three, and the analog or the I. But  
6 then the last character denotations would be -- and  
7 that's something that's invisible to the controllers.  
8 They don't generally see that.

9 Q Right.

10 A So, yeah, that's what we did.

11 Q Do you feel or have you had any training,  
12 formal training, besides ~~OGT~~<sup>OSTA</sup> training on building  
13 screens? <sup>^</sup>

14 A No, sir.

15 Q So do you feel that you're using all the  
16 capabilities that are built into the screens as far as  
17 colors, sounds?

18 A I don't feel that I'm an expert, no. I feel  
19 like I got a pretty good handle on it. And using most  
20 of the attributes, symbols, things like that. But, no,  
21 there's more I can do. There is more I can do.

22 Q Just not enough time?

23 A That's probably it, yeah, because that was my  
24 second job. I was trying to be a controller also.

25 And when you bounce between them, it's a lot.

1 It's a big job to keep current on and digest and  
2 maintain.

3 Q Have you had any formal training in VMS  
4 operating systems?

5 A I have not.

6 Q Just OJT again?

7 A OJT again, yes, in a mentored, controlled  
8 environment with Todd. And, generally, when that was  
9 done, that training, if there was any kind of a threat,  
10 it was done on a machine that was off-line.

11 Q Do you maintain a VMS documentation set, or  
12 do you have CDs?

13 A We have, actually, we have the documentation  
14 set I believe in what they call -- I think we have  
15 both. We have the CD and we have the --

16 Q The lines?

17 A The tapes, the volumes.

18 Q But you don't have the book volumes?

19 A Oh, yes, we do. We have the old original  
20 volumes and we have the CDs. Sorry. I thought you  
21 were talking to the actual program itself.

22 Q Is your ~~SCA/A~~<sup>D</sup> set up to automatically, like  
23 when VMS kicks off, you know, once VMS comes up, does  
24 it automatically start up ~~SCA/A~~<sup>D</sup>, or is that a manual?

25 The ~~SCA/A~~<sup>D</sup> command set?



1           A        The SCA<sup>D</sup>/A command set.  Once you're at the  
2 menu prompt, you have a choice to start it.  And once  
3 you start that, yes, it will line up the processes and  
4 then trip the final flag, which simultaneously starts  
5 the SCA<sup>D</sup>/A system.

6           Q        That's not automatic?  If there was nobody  
7 there, it would just sit there?

8           A        Correct.  Unless it's a fail.

9           Q        No, but coming up from a cold ~~blue~~ <sup>boot</sup>.

10          A        From a cold blue, no, it requires  
11 interaction.

12          Q        I'm going to come back to that.

13                    The terminal that you were doing the --  
14 building the historical records, is that an external?  
15 A DEC windows terminal of some sort?

16          A        Yes.

17          Q        So that would be like a lap terminal?  It's a  
18 network terminal?

19          A        It's a network terminal, yes, the transport.  
20 I don't believe we were using LAT.  I believe we were  
21 using DEC's proprietary transport.  It might be.  I--

22          Q        I think you're the only ones that use it.

23          A        Okay.

24          Q        But it's not a serial terminal.  You do have  
25 a console for each machine... to the console port?

1 A At that point in time, we did, yes.

2 Q That was just a regular teletype printer?

3 A It was, yes. A logger type. It looks like a  
4 typewriter.

5 Q Yes, an LE-100?

6 A That's it..

7 Q In general, how would you kind of  
8 characterize your system as far as let's say disk  
9 space? Is that generally an issue or do you normally  
10 have plenty of space and you aren't too concerned about  
11 that?

12 How would you generally characterize prior to  
13 the--

14 A Prior to any upgrades or anything?

15 Q Well, the June 10th.

16 A Well, to be honest with you, I'm not -- I  
17 don't know enough to make a judgment call on that. But  
18 it was never an issue. It was never something that was  
19 ever voiced, said, "Oh, we're running out of disk  
20 space, let's do this." Never an issue.

21 Q How about like processor? Idle time and all  
22 that? Was that --

23 A I was aware of the processor load percentage  
24 and that it, you know, and that it was running up  
25 there. You know, up in the 85 percent range, something

1 like that.

2 Q Continuously?

3 A I don't know if that was continuously or not.  
4 I don't know. Once again, remember, I'm very, very  
5 junior when it comes to SCATA expertise.

6 Q In your mind, how long does it take like for  
7 a cold boot for VMS to come up?

8 A At that point in time, it was twelve to  
9 fifteen minutes, depending on how rapidly -- if you're  
10 standing right there responding to the day time input  
11 and the logger prompts, file transfer prompting and  
12 such, it would take twelve to fifteen minutes.

13 Q And I don't understand what it's prompting  
14 for. This is VMS when it's coming up, or SCATA?

15 A This is, well, they work hand in hand. Those  
16 machines were dedicated as SCATA, so the VMS, the OS  
17 would start first.

18 Q Okay and that --

19 A And then prompt for date and time and your  
20 login. It was date and time primarily and then it  
21 would do its startup thing. Then you would be required  
22 to I believe log in to VMS, and then you would have the  
23 menuing option to do real time system startup for the  
24 Vector-SCATA system.

25 And, at that point in time, you initialize,

1 say. yes. real time system startup. Then it asks you  
2 for a transport option, or a file transport option.  
3 You know, which files do you want to copy over.

4 Q But, say cold boot to VMS was fifteen  
5 minutes?

6 A To VMS? I don't know. The entire process to  
7 ~~SCATA~~ startup is fifteen minutes. I would say the cold  
8 boot VMS to that first prompt and those first machines,  
9 I would guess it to be maybe six. I don't know. It's  
10 just a guess.

11 Q It took almost as long as starting ~~SCATA~~?

12 A Well, I don't know. VMS may be quicker.  
13 I've never paid attention to that aspect of it.

14 Q You kind of alluded that you had known about  
15 several pressure relief valve cycles at the Bay View  
16 station in the previous months before the June 10th?

17 If I search -- I have backups say in the last  
18 two months. Would you think there's a good chance of  
19 having a hit in there on one of those pressure valve  
20 cycles in the last two months?

21 A Oh, there were a bunch of them, you know,  
22 yeah. But, whether the line was actually active or  
23 not. I know that there's been numbers passed around for  
24 the frequency of relief valve indications and all of  
25 that.

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no changes.*

1           A lot of those were done in an idle state  
2 while we were checking the facility out, you know.

3           Q       So you'd have to be careful not to --

4           A       Yes, you'd have to be careful to say, oh,  
5 yeah, you've had this many instances of this. Well,  
6 you know, the truth is a lot of those times, the  
7 facility was shut down.

8           Q       I was considering going back those last  
9 several months and just querying, searching through,  
10 looking for those.

11          A       Feel free.

12          Q       At 3 o'clock in the morning, there are  
13 probably --

14          A       They're probably the real thing, yeah. Yes,  
15 unfortunately, we haven't been able to twist the  
16 mechanics' arms into coming out at all times of the  
17 day, you know.

18          Q       But, if it's 2 o'clock in the afternoon, it's  
19 maybe a test; right?

20          A       It's hard to say. But, generally, if they're  
21 going to be out there testing, it could happen at any  
22 time. But, yeah, they plan their day and it will be  
23 during normal working hours.

24                   And you'll probably see a lot of them grouped  
25 together, a lot of activity.

1 Q Can I just go through one more time and just  
2 make sure that I have it straight on the failure?

3 A You bet.

4 Q So you did the historical record change. And  
5 then you felt you typed it in. You basically cut and  
6 pasted from.

7 A No cut and paste. It was all typed in input  
8 on the form. However, I had the other form right above  
9 it that was full, so I knew which fields needed what.  
10 And the form above it was for an identical point at  
11 another pump station.

12 Q So all you had to do was make the correct--

13 A Follow the pattern.

14 Q Yes, but change the data input source to be  
15 the correct one.

16 A Correct.

17 Q I wondered why you had the two screens up and  
18 I thought you were cutting and pasting.

19 A I wish. I wish it was that easy.

20 Q So then you submitted that and it seemed to  
21 take it okay. And then you -- no, you didn't go away  
22 then. It was starting to generate errors after a  
23 while?

24 A Yes, after that initial test, you know, and  
25 things looked okay to me, I felt pretty good about my

1 work and I did something else. You know, I don't know  
2 what I was doing, something, maybe looking at my  
3 display work documenting, you know, something.

4 I don't know. I don't know what I was doing.

5 Q Right.

6 A And then when I checked it again -- and  
7 that's normal. You do something, you check it and give  
8 the machine a chance. It can dynamically set  
9 priorities. You know, give it a chance to digest and  
10 check it again and make sure that it likes what it's  
11 gotten.

12 And when I did check it again --

13 Q It was still on your X-terminal?

14 A This was still on my X-terminal, yes.

15 Q It was still responding at that point.

16 A And this was still on the number two machine.  
17 That terminal was on the 2 machine.

18 Q It was actually on both unless you closed the  
19 other window; right?

20 A Well, now the other machine, I didn't  
21 necessarily have to be logged on to the other machine  
22 at that point in time. You know what I mean?

23 Anyway, just two windows. And they could  
24 both be on the same machine. Anyway, that's it. And  
25 then about ten minutes later, I started getting these

1 errors.

2 Q Do you remember what error it was?

3 A It was pertaining to the historical data  
4 base. I believe it was -- and I believe it was  
5 complaining about those specific records I had created.

6 Q Okay, and then you checked your work and it  
7 was still responding okay?

8 A Checked my work. My work came back clean.  
9 It looked good. I felt and you know it was still  
10 generating alarms, you know, at its normal frequency,  
11 which is a lot of alarms. You know, a lot of errors.

12 And then, you know, the computer seemed to be  
13 healthy. And from what I understood, that was normal.  
14 I mean, there was nothing I could do in that data base  
15 that would cripple that computer.

16 Q Had you ever made a record change that  
17 generated alarms?

18 A I have, yes.

19 Q It appeared the same way?

20 A Appeared the same way. And I would just back  
21 out by deleting the record and -- or looking at it,  
22 noticing my error, and that.

23 Q So, at that point, you had deleted -- you  
24 went in and deleted the records that you --

25 A No. No, at that point in time, I felt, like



1 I said, that there was a -- how do I put this -- that  
2 there was a time frame that seemed short to me that the  
3 computer had saw something it didn't like and started  
4 generating errors.

5 Well, it's thinking in milliseconds,  
6 whatever.

7 Q Right.

8 A And it's generating these alarms and that  
9 they will go away because I was confident in my work.

10 So the computer was healthy. Everything  
11 seemed just fine plus the knowledge that nothing really  
12 I could do there would hurt the health of the machine.

13 I walked away for approximately 20 minutes or  
14 something; came back to sit down and double-check to  
15 make sure that the errors were gone and that it had,  
16 you know, done what I was thinking it should do, when  
17 it was unresponsive.

18 And, at that point in time, almost  
19 simultaneous to me typing in the command and waiting at  
20 the prompt going "huh", Ron sticks his head in the door  
21 and says, "This thing is not responsive."

22 And that's when I started the routine of  
23 trying to do a recovery.

24 Q All right. And you went to the console; that  
25 didn't respond either?

1           A       My initial, yes, the console was  
2       unresponsive. The LA-100 was unresponsive. The  
3       machine would not respond to me, 2. However, I was  
4       able to access the data base through an x-term that was  
5       on the secondary.

6           Q       Okay, that was the replicated data base?

7           A       Yes.

8           Q       The only one at that time?

9           A       Yes. And data base records are in real time  
10      memory. My thinking was that I could go up and delete  
11      it on the secondary on real time and that that would  
12      take care of it.

13                 And that was my intent. I was able to get in  
14      there. I was able to delete the records. I felt that  
15      they were gone. At that point in time upon deletion,  
16      having no other means to do an orderly fail on 2, the  
17      only thing I knew to do was halt it.

18                 And that's what I did. At that point in  
19      time, it was my belief that 1 was then primary, should  
20      have taken over role as primary, function as primary.  
21      I made my pass through the control center, went back.  
22      It wasn't doing it.

23                 I immediately started the reboot process on  
24      2. I may have started it before I even left. You  
25      know. Knowing that it took a while and I wanted to be

1 speedy. And just prior to 2 coming up final, I halted  
2 1 to make sure there wasn't additional mirroring or  
3 corruption happening back from 1 to 2.

4 Q How far along -- was 2 coming back up when  
5 you--

6 A Oh, just I crashed one just prior to the  
7 final message that SCA<sup>D</sup>A was started. There's a  
8 duration. You follow the --

9 Q I see. So the VMS was up and you had already  
10 kicked up SCA<sup>D</sup>A.

11 A The VMS was up. SCA<sup>D</sup>A was starting. It's  
12 got like 13 processes that it starts before it gets to  
13 the final live flag. And at that point in time, JAMMIT  
14 trips it and it comes live.

15 Q So you just halted.

16 A And I just halted 1, and 2 at that point in  
17 time appeared to be healthy.

18 Q What was your indications that 1 wasn't  
19 cutting the mustard there?

20 A The pass through the control center, the fact  
21 that some of the sites appeared to be displaying a  
22 "sianne" color which denoted communications failure.  
23 Some were; some weren't.

24 I'm sure the dispatchers mentioned that there  
25 was sluggish response or no response from set point

1 ramping. Things like that.

2 Q You didn't, you know, run any test or  
3 anything on 1, run the command that --

4 A You know, I felt under the gun. I felt like  
5 if it was going to get better in that twelve to fifteen  
6 minutes, 2 was booting, that it was going to get  
7 better.

8 I'd done all I'd known to do, you know.

9 MR. CASH: Excuse me for a second to see  
10 this.

11 (Perusing documents.)

12 That's it for me. Thanks.

13 MR. TIEKEN: You're welcome.

14 INVESTIGATOR BESHORE: Eric.

15 MR. TIEKEN: Hi, Eric.

16 BY MR. SAGER:

17 Q On June 10th, were you asked to provide a  
18 urine specimen?

19 A I was.

20 Q What time?

21 A Later on in the evening, probably. I believe  
22 I was over -- this incident happened somewhere around,  
23 you know, 1630-1700. And I believe I donated around no  
24 later than 1830, 1900.

25 Q What time were you asked to provide a

1 specimen?

2 A I don't remember.

3 Q Do you recall who asked you?

4 A No. I was handed a package and I went to the  
5 hospital.

6 Q You don't remember who handed you the  
7 package?

8 A No.

9 Q Would you have any objection to providing the  
10 Safety Board with the results of any tests that were  
11 done on that specimen?

12 A No.

13 Q On the 10th of June, were you taking any  
14 medications?

15 A If I was, it would have been Sudafed for  
16 sinuses, and that's it. And you'll probably find some  
17 caffeine in there, too.

18 Q How much caffeine?

19 A Oh, I don't know. I drink three to four cups  
20 a day.

21 Q Do you drink coffee when you're not working?

22 A Yes, sir.

23 Q What time did you come to work?

24 A Between 6:30 and 7.

25 Q How much sleep had you had?

1           A       A full night, thank God. I really relish  
2 working days. The older I get, the shift work is more  
3 difficult for me. But, yeah, I'd slept real well. I  
4 always do.

5           Q       What time did you go to bed?

6           A       Now that's a good question. I would say my  
7 normal no later than 10.

8           Q       Is that your routine?

9           A       Yes.

10          Q       When you're working days?

11          A       You bet ya.

12          Q       And how many hours of sleep do you normally  
13 get when you're not working?

14          A       When I'm not working day shifts, it averages  
15 around six to seven. You know, it depends on when I  
16 get to bed. Last night, I was in bed and asleep by  
17 probably no later than 10, you know. And I'm up by  
18 4:30, you know. So, six and a half to seven.

19                   And then, if I get tired, I'll get eight to  
20 nine, something like that.

21          Q       When you're not working?

22          A       Oh, when I'm not working? It depends on--  
23 I'd better not say that.

24                   (Laughter.)

25                   I get about the same, I would say. I've got

1 a pretty solid clock, you know. I would say more  
2 though. I would say generally eight, eight to ten,  
3 maybe a little more.

4 Q Per night when you're not working?

5 A When I'm not working, yeah. Maybe, make it  
6 seven to nine, I would say. You know, a little more,  
7 not a whole lot more.

8 Q I know this is asking a lot from your memory  
9 but do you remember how you were feeling on the 10th?

10 A I was feeling great. Yeah, feeling good.

11 Q In what respect?

12 A All respects. I was confident in the work I  
13 was doing. I was pleased that I got to do something  
14 and be working outside of the control center. I was  
15 welcoming the opportunity. I liked it. I liked what  
16 I'm doing. Still do.

17 Q Do you smoke?

18 A No, sir.

19 Q Do you use any tobacco?

20 A No, sir.

21 Q How would you describe your diet?

22 A Boy, my wife works full time. Not enough  
23 home-cooked meals. I would say it's good though. I  
24 get adequate food.

25 Q What is adequate food?

1 A Well, you tell me (laughing).

2 Q Tell me about it.

3 A I have good food. I, you know, just what do  
4 you want to know? I bake potatoes. I eat steaks. I  
5 eat Ramin. I eat Macaroni and Cheese. You know, I eat  
6 everything. Greens. A little bit of everything.

7 Breakfast, I'll generally have a muffin,  
8 something like that, a blueberry muffin or a scone with  
9 my coffee.

10 Q And your mid-day meal?

11 A Mid-day meal, Eric, it will be whatever I  
12 happen to grab out of the frig. You know, I'll have  
13 some fast foods that I can nuke. When I'm working  
14 special assignment as I was that day, I'll go out for  
15 lunch, you know.

16 Sometimes, I won't eat lunch out. I'll eat  
17 it at my desk. But I'll eat whatever I have. You  
18 know, leftovers if I'm lucky.

19 Q And your main meal?

20 A My main meal?

21 Q Yes, that's your mid-day meal that we were  
22 talking about.

23 A My mid-day meal?

24 Q That's what we were just talking about,  
25 wasn't it?



1           A       Well, I don't know. I was kind of touching  
2 base on all of them, sir. But, if you're referring to  
3 my main, which you call mid-day meal -- I've always  
4 thought a dinner is my main meal. But, okay, if you  
5 think main is mid-day, I'll have -- whatever I have.  
6 Ramin soup. Sandwiches. You name it.

7           Q       Was there anything unusual or any serious or  
8 major departures from this kind of food on the 9th and  
9 10th of June?

10          A       No, sir.

11          Q       Nothing stands out in your mind?

12          A       No, sir.

13          Q       How many days had you worked consecutively on  
14 the 10th?

15          A       Well, it was a normal week, Monday through  
16 Friday. What day was the 10th? I want to say -- was  
17 it a Tuesday? It was a Thursday? So that would be my  
18 fourth day.

19                   I have to apologize. I don't mean to be flip  
20 about the meals, you know, but it's pretty tough when  
21 you start describing them unless you, you know, unless  
22 you're anal about baloney sandwiches day in and day  
23 out.

24          Q       No problem. Were you on the 10th under any  
25 particular personal stress, not associated with work?

1           A       I have had some stress in my life but on that  
2 particular day, I don't recall any that may have been,  
3 you know, may have impacted my performance in any way,  
4 shape or form.

5           Q       And you're taking no prescription  
6 medications?

7           A       That is correct. That is correct.

8           Q       Earlier, you alluded to how controllers  
9 sometimes work by talking out loud.

10          A       Yes.

11          Q       Have you ever worked with Kevin ~~Divig~~?

12          A       Yes.

13          Q       Does he talk out loud?

14          A       He does.

15          Q       Does he talk out loud all the time or when  
16 he's excited? Or any other remarkable time?

17          A       I can't give you any specifics. Kevin, you  
18 know, Kevin will talk. You know, we all kind of talk  
19 to ourselves now and then. You know, I mean it's no  
20 more than any other individual, I don't believe.

21                   No, there's nothing that stands about, you  
22 know, Kevin thinking out loud.

23          Q       It does not stand out in your mind that he  
24 works in silence though?

25                   Let me rephrase it. Is he a particular quiet

1 worker?

2 A Huh-uh.

3 Q And it wouldn't surprise you if he was  
4 talking out loud, and it wouldn't surprise you if he  
5 was not talking? Is that what you're trying to say?

6 A Well, I'll tell you, you know, we do so much  
7 communication -- on the phone, on the Unicator, with  
8 our backs to one another. You know, it all mixes  
9 together.

10 I don't -- you know, that's a tough call.

11 Q When you were with Mobile, what capacity did  
12 you hire out on?

13 A Did I hire in as? As a pipeliner.

14 Q And does that mean you were working outside?

15 A Yes, sir, I started out on the pipeline  
16 digging it up and coating it and repairing it and  
17 painting it.

18 Q Was that right out of high school?

19 A No, sir. I was twenty years old, I believe,  
20 when I started.

21 Q Service time?

22 A With Mobile? No. Oh, military?

23 Q Yes.

24 A I'm a military brat, but no service for me.

25 Q And what had you done between the time of

1 high school and you joined Mobile?

2 A I was a cook.

3 Q Would you trace your work history while you  
4 were with Mobile?

5 A Why, sure. Pipeliner, station operator,  
6 field gauger.

7 Q And at about what time intervals?

8 A Okay, pipeliner was relatively short -- six  
9 months. Station operator, relatively short -- six  
10 months. Field gauger, initial stint, approximately,  
11 two years. Pipeline controller initial stint,  
12 approximately two years, I would say. That's a total  
13 of five, is it?

14 Okay, and then for the next six or seven  
15 years, I believe I was a field gauger out of Torrence  
16 meters. And then for the balance I was -- and maybe  
17 less on that field gauger thing.

18 Two years also I ran the prover truck. I was  
19 a measurement person, calibrating flow meters  
20 throughout the State for Mobile. Running a tractor-  
21 trailer setup. And then I was a controller for the  
22 balance of my time in Mobile's Dallas National Control  
23 Center.

24 Q How many years total did you have?

25 A With Mobile, grand total? Fifteen.

1 Q Why did you leave?

2 A Why did I leave? Well, for one thing, I grew  
3 up in Alaska and I'm not particularly fond of Texas.

4 For another thing, my father lived in Spokane  
5 and had gotten cancer and was dying. And that was the  
6 main thrust is I wanted to get somewhere close to where  
7 I could be with my dad before he died.

8 Q And who hired you here?

9 A I was interviewed primarily by Ron Brenson<sup>†</sup>  
10 but I went out to dinner with Ron Brenson<sup>†</sup>, Duane<sup>n</sup>  
11 Whitlow, Will Hood, Dave Smith on my initial contact.

12 And Dave Smith, I had worked with him with  
13 Mobile<sup>/o</sup>. I had some history with Dave on the West Coast  
14 prior to hiring.

15 Q Do you have much contact with Al White?

16 A Yes, a little bit. A little bit. Not much.

17 Q What kind of contact do you have with him?

18 A Initially --

19 Q Current contact.

20 A Current contact?

21 Q Just back of the 10th.

22 A Well, very little currently. He's, you know,  
23 he's -- we've kind of all been upset since August 16  
24 when BP took over, you know. And we kind of really  
25 don't, you know, don't see a whole lot of each other

1 while things shake out and people get their different  
2 positions and such.

3 I do realize that Al had for a while there  
4 been appointed to leading up to management of change  
5 processes within BP. And that's -- and I might see him  
6 briefly on a daily basis. Just briefly.

7 Q Had he ever consulted you about complaints  
8 that he had gotten from controllers? About Bay View or  
9 any other controlling problems?

10 A He took ownership of -- I believe there was  
11 towards the end of the Equilon thing, or in the middle  
12 of the Equilon -- I don't know if it was Equilon or  
13 Texaco at that point in time. But, at that point in  
14 time, I think it was Equilon.

15 You know, we were getting -- the controllers  
16 were getting a little bit frustrated with the Bay View  
17 situation. Al did take ownership of an issue raised by  
18 John Smith and tried to help facilitate meetings along  
19 those lines and address some of these issues that John  
20 felt he had.

21 And I think then he was spearheading  
22 Equilon's version of management of change, then as well  
23 as other -- another title, Best Practices, I believe it  
24 was.

25 He was part of the Near Miss thing. He's

1 another guy that was taking ownership and doing as much  
2 as he could.

3 Q Between Kevin and Ron ~~Burke~~<sup>T</sup>, who is the more  
4 senior controller? <sub>↑</sub>

5 A I believe Kevin is.

6 Q What would make him more senior?

7 A Experience.

8 Q In terms of?

9 A Time in grade, as well as I believe at one  
10 point in time there was -- there's a title, too. Kevin  
11 is a Controller II, and Ron is a Controller I. At that  
12 point in time, that label existed, or those titles  
13 existed.

14 Q What do they mean?

15 A Controller II generally means that you  
16 accomplish certain on-the-job training bench marks,  
17 including training other people for the job. Time -- I  
18 believe there was a ten-year time frame, things like  
19 that.

20 And I'm sure that your track history was part  
21 of that benchmark, you know, things like that.

22 Q Were there just two levels of controllers at  
23 that time?

24 A Yes, sir.

25 Q And then controller trainee, or something

1 equivalent?

2 A I would imagine, yeah, something like that.

3 MR. SAGER: That's all I have right now.

4 Thanks.

5 MR. TIEKEN: Okay. Thanks, Eric.

6 INVESTIGATOR BESHORE: I have a few questions  
7 for you.

8 First of all, I think just as an  
9 administrative matter, I need to label this Compulsion  
10 Order as Exhibit Tieken No. 1, because I did that  
11 earlier.

12 So I'm going to do that and that will be  
13 entered into the record. Do we need to go off the  
14 record?

15 (Record paused.)

16 (Whereupon, the previously-  
17 identified document, marked as  
18 Exhibit Tieken 1 for  
19 identification, was received  
20 into evidence.)

21 BY INVESTIGATOR BESHORE:

22 Q And I believe I just was talking about the  
23 label on your exhibit here, the Compulsion Order. And  
24 so just for recordkeeping, we'll make sure we get that  
25 entered in.



1           You had mentioned, Lloyd, the diagnostic  
2 program. Does that generate some kind of a record, a  
3 file that's created that it stores the results of that  
4 in somewhere?

5           A       There is an error dot dat file, yes, that  
6 mirrors that.

7           Q       And is that like rewritten every time you run  
8 that diagnostic?

9           A       No. If I understand it correctly, that is  
10 written all the time. When I run the diagnostic, it  
11 just plays it back.

12          Q       Oh, okay, so that diagnostic assesses that  
13 file and tells you what's in it?

14          A       I think so. Actually, to be honest with you,  
15 I'm not absolutely clear on the relationship between  
16 the two. It may be that when I run that utility, I'm  
17 getting them as they happen and it's not playing  
18 anything back.

19                 But, they read by me and deposit it in the  
20 error dot dat file.

21          Q       But you believe that that would store some  
22 record of some of these error messages in that file?

23          A       Yes, sir.

24          Q       About how many different screens did you  
25 develop for the Bay View facility, do you recall?

1           A        Okay, let's see. I would guesstimate, well,  
2       seven or eight, something like that.

3           Q        Is that a typical number compared to the rest  
4       of your station facilities?

5           A        I don't know that you can say there's a  
6       typical number. I would say, since Bay View is so  
7       large and complex, it's more than other facilities.

8           Q        So other facilities probably have fewer than  
9       that?

10          A        Yes. And there could very well be more.  
11       There may be as many as 12.

12          Q        Okay. Now how was your morale as of the time  
13       of the accident?

14          A        It was good. Okay? You know, it was good.

15          Q        How about the morale of your co-workers in  
16       general?

17          A        You know, co-workers in general, I would have  
18       to say morale was probably average, you know. Average.  
19       Maybe, below average.

20          Q        Was it better or worse than, for example,  
21       when you joined the company?

22          A        I can't say it was any worse. To me, it just  
23       seemed to be a norm. Not that great, you know. Not  
24       that great.

25          Q        So you didn't notice any decline for any

1 particular reason in morale?

2 A Not -- no. No. No, just concern as to the  
3 perceived workload that Bay View might implicate in its  
4 operation, you know, and what that would mean. And a  
5 lot of that is the fear of the unknown, I believe. You  
6 know.

7 Q How about did you notice any kind of a  
8 tension I guess between the former Texaco people or  
9 former Shell people or that kind of thing that you  
10 noticed in your...?

11 A The only, you know, there was a division.  
12 Without a doubt, there was the Equilon people and there  
13 was the Olympic people, you know.

14 And whether that was perceived or what or  
15 just driven by title, I don't know. But it just seemed  
16 -- it almost seemed like, you know, since they were  
17 administrators, that what they said went. And that our  
18 feedback was ignored if it didn't agree with, you know,  
19 their agenda.

20 That was the feel. Whether it's, you know, I  
21 can't tell you whether it was real or not. I'm real  
22 happy to work there. I always have been.

23 Q Well, I was asking your perception --

24 A I like what I'm doing. And that is it.  
25 There was definitely a morale issue. Not so much

1 Shell and Texaco but each time a new administrative  
2 company walked in the door, they had their own pet  
3 plans that were rolled out.

4 And even to the point of -- I've been told.  
5 I haven't experienced -- where they would try things  
6 that the Olympic people knew wouldn't work, and they  
7 would ignore feedback because they wanted to learn  
8 themselves, you know. Things like that.

9 Q And the Equilon people were senior  
10 management, correct?

11 A Yes, they were.

12 Q They were the management team.

13 A They were the management team, yes.

14 Q The management team was the Equilon.

15 A Yes.

16 Q As a controller, were you aware when the pipe <sup>LINE</sup>  
17 was ~~finalized~~ <sup>FLOWN</sup>?

18 A I can't say always. Generally, we would be  
19 made aware of he saw something that we needed to know  
20 about. And I believe a schedule was published. But,  
21 as far as ~~him~~ <sup>me</sup> saying, Hey, I'm ~~flying~~ <sup>flying</sup> now and this is  
22 what I'm flying -- no.

23 MR. SAGER: Where was it published?

24 MR. TIEKEN: I don't know. I can't tell you  
25 where. I want to say I've seen one, you know.

1 BY MR. BESHORE:

2 Q So I guess what you were getting at was a  
3 posted in the control room on a weekly basis?

4 A No. No, no, I don't believe anything like  
5 that took place. It was more or less, "Yeah, the pilot  
6 flies it." I may have even heard it, you know, word of  
7 mouth, "The pilot flies it once a week," you know.

8 Q Now I want to ask you a question about if an  
9 operator, for example, at the local to the Bay View  
10 facility entered a command into the system there, at  
11 the computer system. And they can operate certain  
12 things and devices within Bay View; correct?

13 A Yes, sir.

14 Q From a console there?

15 A Yes, sir.

16 Q Is that going to show up in your command  
17 center as an uncommanded entry?

18 A Yes, it would.

19 Q An uncommanded entry may also be the result  
20 of somebody physically doing something manually;  
21 correct?

22 A Yes. However, prior to at Bay View facility,  
23 a valve moving was someone at the valve. The valve has  
24 to be taken into an off/auto state. And we get state  
25 indications from the valve.

1           So we would, you know, prior to a valve  
2           operating, we would show that "state" changed from  
3           "remote" to "off auto".

4           Q        Would you see that same change from remote to  
5           off auto if a command were issued to the console at Bay  
6           View for that same way valve closure? You wouldn't get  
7           that extra little indication?

8           A        No, sir.

9           INVESTIGATOR BESHORE: Does anybody have any  
10          other questions? All right, Peter.

11          MR. KATCHMARE: Thank you, Allen.

12          BY MR. KATCHMARE:

13          Q        Lloyd, when you were at Mobile~~o~~ and you were  
14          out in the field and they brought you in to be a  
15          controller, how much training -- how long did it take  
16          you before you were allowed to operate alone?

17          A        With Mobile~~o~~ being the first time I had ever  
18          been a controller? Oh, I want to say six months maybe,  
19          something like that.

20          Q        And then when you came to Olympic, you  
21          obviously had a history of being a controller. How  
22          long did it take you to come up to speed to where they  
23          allowed you to go into the rotation?

24          A        I want to say in the neighborhood of three,  
25          three to four months, something like that.

1 Q Okay. When you went into the control room  
2 after you had halted only 2, and only 1 was coming back  
3 up. And you walked into the control room, you  
4 mentioned that you had overheard Kevin on the phone  
5 asking someone -- or Jim -- at Allen Station to shut  
6 down a pump there?

7 A That's incorrect.

8 Q Okay.

9 A I overheard Kevin talking out loud. He may  
10 have been directing it at me, stating that he had had  
11 Jim shut down a unit at Allen station.

12 Q It had already happened?

13 A I don't know. My assumption is that it had  
14 happened at that point in time, yes.

15 Q Okay. Did you hear anything else, or did  
16 Kevin say anything else to you about anything else that  
17 he had done?

18 A Didn't have time. I was just passing through  
19 scanning the monitors. And, you know, taking care of  
20 the computers. That was my primary role at that point  
21 in time.

22 Q Did Ron ~~Burke~~<sup>T</sup> say anything to you while you  
23 were in there?  
^

24 A I don't recall anything, no. Ron looked  
25 pretty busy.

1 Q Ron Burke looked pretty busy?

2 A Yeah, he looked pretty busy.

3 Q Doing things on the screen or on his  
4 paperwork?

5 A Whatever he was doing, he just looked busy.  
6 I don't know if he was on the phone talking to people,  
7 logging information, what. But, whenever I was in  
8 there, he was busy.

9 Q When you were saying that the controllers  
10 usually talk out loud, the question is:

11 Would Kevin have, in your opinion now -- I  
12 know you weren't in there -- but would Kevin have said  
13 to Ron Burke, "I think I'm going to call Jim at Allen  
14 station and have him turn those pumps off"?

15 Or would he have asked if Ron Burke thought  
16 that was a good idea? How do you think that would have  
17 gone?

18 A I think that that was Kevin's line and he  
19 would have just done whatever -- he knew where his  
20 people were. Ron was running his line. Kevin knew  
21 where his people were, when they were getting there,  
22 what his options were.

23 He knew the history of the pipeline for that  
24 time frame leading up to it. I believe it was Kevin's  
25 call, you know.



1 Q When you're operating one or the other of the  
2 line segments, you just indicated that Kevin knew where  
3 his people were. When anybody arrives at a station, do  
4 they call into the control center to say "I'm here"?

5 A They try to, yes.

6 Q Okay, and that's how you would know?

7 A Well, unless you had managed to contact them  
8 and they were near by and directed them there for help.

9 Q And you also mentioned that Olympic is one of  
10 the -- the only one that you know of that they work  
11 people in tandem.

12 Have you ever worked a line that has been  
13 looped?

14 A Yes. I have.

15 Q And you've worked it by yourself?

16 A Yes, I have. Wolverine Pipe Line System.

17 Q Okay. And it's very similar to the --

18 A In some respects, yes. It's similar in its  
19 capability. But, when I was running it back in '93,  
20 '92, their philosophy was way different. They were  
21 point to point. They didn't strip.

22 They -- you know, they've got no topography  
23 to deal with. You know, it's a very linear hydraulic  
24 profile. It's similar but different.

25 Q So, in your estimation, this is a lot more

1 complex loop system?

2 A This system, because of the flexibility  
3 options, and in addition to Bay View, yes, it is an  
4 extremely complex system.

5 Q Is there enough work for two controllers to  
6 operate the Olympic pipeline system?

7 A Is there enough work?

8 Q The reason I'm asking, this is the first  
9 place you worked in tandem with someone. Could one  
10 person operate this entire system? Or would that be  
11 too much?

12 A I honestly believe that would be too much  
13 work for one person. I think if all your ducks are in  
14 a row and everything's just perfect, and maybe if they  
15 slowed them down and the scheduling was just right and  
16 nothing right, yeah, you might get away with it.

17 Q Have you ever had a relief valve go off while  
18 you were operating the pipeline system? Any portion of  
19 the pipeline system?

20 A Yes, I have.

21 Q And how many barrels may have gone into the  
22 tank?

23 A We're talking where?

24 Q Doesn't matter to me. Anywhere.

25 A It depends. It depends on where you're at

1 and the kind of flow rate and things. Generally, I  
2 would say anywhere from five to ten barrels.

3           Could be more if the relief failed. You  
4 know, failed to reset and hung open. It just all  
5 depends. But, on the average, five to ten barrels, I  
6 would say, would be a good average.

7           Q       That's what I wanted was just some kind of a  
8 quantity. You were talking about the near miss  
9 reviews. Were there any near miss reviews done on the  
10 valve closure at Bay View?

11          A       I don't know. None that I'm aware of.

12          Q       Any -- not with Bay View?

13          A       Now wait a minute. When you say with the  
14 "valve closures", are you referring to when the  
15 facility was doing what it was designed to do, protect  
16 itself? Since it was doing what it was designed to do,  
17 that wouldn't be considered a near miss, I don't  
18 believe.

19                   I mean it was designed to do that. It was  
20 doing its job.

21          Q       Were any of these concerns at Bay View  
22 considered near misses? Or were any of these problems  
23 ever taken to a level where anybody, a group of people  
24 sat down and discussed them?

25          A       They may have.

1 Q To your knowledge?

2 A To my knowledge, I believe that they were  
3 discussed. But whether it was a professional forum or  
4 whether it was just impromptu. "We happen to be here  
5 in the safety meeting. Let's talk about this."

6 I believe all were aware that we were dealing  
7 with issues at Bay View.

8 Q Can you remember a safety meeting, attending  
9 a safety meeting where they discussed problems at Bay  
10 View?

11 A I don't know. I can't. But I do want to say  
12 there was a meeting or two talking about by the  
13 supervisors, area chiefs, my supervisor, Frank, maybe  
14 Doug.

15 But I can't say for certain.

16 Q Did you feel comfortable with the people that  
17 you called out to help you with the problems that you  
18 were having at Bay View? Were you comfortable with  
19 their experience level and knowledge that they could  
20 fix the problem?

21 A I felt comfortable that the problem could be  
22 fixed, whether it was one, two or three people. It's  
23 kind of the nature of the business if it's mechanical-  
24 related, you know, and the operator can't deal with it,  
25 you call the mechanic.

1           The mechanic says that it's got tied into the  
2 electrical side of things. I feel comfortable that the  
3 problem would be fixed, yeah.

4           Q       Okay, but I guess it happened three to five  
5 times that you know of when they were called out and it  
6 never had done this.

7           A       No, each time they tested it and calibrated  
8 it, it worked as it should have. I mean they checked  
9 it, they tested it, they calibrated it. You know, they  
10 flowed through it.

11           It appeared by all rights to me, the suspect  
12 relief valves, that they were working and set properly.

13           MR. KATCHMARE: Thank you, Lloyd. I'm done.

14           MR. TIEKEN: You're welcome.

15           INVESTIGATOR BESHORE: Linda.

16           MS. PILKE-JARVIS: I'm sorry. I have one.

17           MR. TIEKEN: That's okay. I've got 'til 6.

18           (Laughter.)

19           BY MS. PILKE-JARVIS:

20           Q       I just wanted you to answer another question  
21 comparing your experiences with Mobile~~s~~, your  
22 experiences with the one...

23           And I'm wondering how you would compare  
24 Olympic's efforts to safeguard its pipeline with  
25 Mobile~~s~~'s efforts to safeguard its pipeline?

1                   And I know that's a very broad question.  
2       Would you say that one company was more aggressive than  
3       the other?

4           A       I would say that not necessarily aggressive  
5       but managed closer, I guess. You know, within the  
6       Mobile thing, there was a lot of step by step forms and  
7       processes and things that addressed certain issues that  
8       I saw more of there than here.

9                   But that's about all, you know.

10          Q       So what I understand you to say is that, at  
11       Mobile, you found that it was a more formal process to  
12       safeguard its lines?

13          A       It seemed to be, yes. At least, that was my  
14       perception.

15          Q       What kind of tools are available for a  
16       company to safeguard its lines?

17          A       Safeguard it from?

18          Q       Damage.

19          A       Damage? From deterioration? From what?  
20       There's training. There's public awareness. There's  
21       cathodic protection. There's engineering. There's  
22       operational considerations.

23                   There's right-of-way maintenance. There's  
24       right-of-way oversight. There's a visual inspection,  
25       internal inspections with any number of tools, be it

1 caliper, magniflux, whatever.

2 You know. Does that answer the question?

3 Q Do you feel that Olympic's procedures for  
4 safeguarding the line were adequate?

5 A Yes. I believe that the people that had  
6 their jobs to do to ensure that that pipeline was safe  
7 to operate were doing their jobs. I had no -- I had no  
8 indication that anything other than that was actually  
9 happening.

10 MS. PILKE-JARVIS: Thank you.

11 MS. IMHOF: I had a question I'd like to ask.

12 INVESTIGATOR BESHORE: Go ahead, Patti.

13 BY MS. IMHOF:

14 Q Lloyd, can you characterize the atmosphere in  
15 the office, the control room and the computer room on  
16 the afternoon of June 10 around 3:30, the time of the  
17 explosion?

18 A Well, from 3:30 to 4:30 I was in the computer  
19 room. And, in there, it was basically just me until  
20 Ron came in there. And as far as that goes, you know,  
21 the atmosphere was task-driven, intense, and confident  
22 that I was doing as much as I could do.

23 And as far as the control room, on my  
24 passthroughs, you know, the atmosphere seemed to be an  
25 atmosphere of concern and watchfulness.

1           Q       Was the atmosphere kind of like a normal day  
2       in the office, or was it -- I mean I know that in my  
3       office, if something is going on, there's a lot more  
4       tension or excitability, urgency.

5                    Was it --

6           A       There was a level of urgency and of course I  
7       was, you know, pretty active. Here, again, I didn't  
8       pay attention to or even digest what I was seeing as  
9       far as what they were doing to do their job.

10                   But, yes. Like I said, watchfulness. There  
11       was an urgency, of course. Kevin was on the phone, I  
12       guess, at times, you know. I don't know. But, yeah,  
13       it seemed urgent.

14                   But, you know, not "the sky is falling."

15           Q       But, nearly everyone was focused on trying to  
16       figure out what was going on?

17           A       Yes.

18           Q       You knew something was going on.

19           A       Well, we knew what was happening. We  
20       couldn't see what was happening but we were visualizing  
21       the events of what was happening out on the pipeline.

22                   And Kevin more than anyone knew that because  
23       he knew where the people were, what had been done  
24       where. And he was watching it happen in his mind.

25                   Even though that computer goes away, you



1 know, you kind of know and have a feel for what the  
2 system is doing. Like I said, a gradual pressure  
3 increase until it hits the point of where the snap  
4 switch will shut it down.

5 You know, shut down this pump station. Then,  
6 the domino effect. The rest of them shut down.

7 All of these protective devices are there to  
8 do just that, to keep the pipeline from ever over-  
9 pressuring.

10 And as far as I know, the pipeline never did  
11 exceed MOP.

12 Q So, in your kind of evaluation of the  
13 situation that you all were dealing with at that time,  
14 whose responsibility would it have been or what would  
15 have prompted making a call or contacting someone in  
16 the field, or the emergency 911 and City of Bellingham,  
17 you know?

18 A At which point in time? This is post-  
19 release, or this is before?

20 Q No, I'm talking about just between that whole  
21 process from 3:30. 3:30 seemed to me to be the time  
22 that everyone kind of knew you had a problem.

23 A Well, no, 3:30 was when the computers went  
24 down and we lost the ability to actually physically  
25 control the pipeline from that location.

1 Q right.

2 A However, remember, we've got all kind of  
3 safety devices out there on the system that are backup  
4 protection that are designed to keep things safe.

5 Q So you're assuming all of those things --  
6 you're operating, you know, your computer is operating.  
7 And, therefore --

8 A Well, it's the best we can do. You know, not  
9 to mention the engineering and the pressure testing,  
10 the ratings, things like that.

11 The switches were set to be substantially  
12 lower than what the pressure testing on the system, you  
13 know, yielded.

14 So, yeah, we felt confident that the  
15 protective devices would do their job. And it wasn't a  
16 -- I believe that the feel was that it wasn't -- the  
17 airplane wasn't upside/down and diving. You know.

18 I believe that it was landing on auto pilot.  
19 I don't know if that's an appropriate analogy or not.  
20 But, you know, we feel and have felt strongly that our  
21 system is safe.

22 But, ultimately, it was Kevin <sup>y</sup> Davig, the man  
23 who had that historical profile of the operation and  
24 the history of that line for that time frame. It was  
25 his call.

1 INVESTIGATOR BESHORE: When did you think it-

2

3 MS. IMHOFF: I found my question.

4 (Laughter.)

5 BY MS. IMHOF:

6 Q Some of the other pipeline companies that  
7 Ecology works with in the State seem to have a very  
8 aggressive policy or kind of corporate/cultural belief  
9 that an aggressive excavation program along with the  
10 other methods that they have of safeguarding their line  
11 isn't appropriate.

12 So, in other words, they're willing to  
13 excavate when they have other indications that there  
14 may be problems.

15 Did you find that Mobil~~o~~ had a policy or a  
16 culture about aggressive excavation?

17 A No. I didn't, to be honest with you, I  
18 really had no knowledge of that type of thing going on  
19 when I worked with Mobil~~o~~.

20 And it always kind of historically been  
21 divorced from the control center. That whole side of  
22 things is transparent to us until someone says "Whoops,  
23 you know, we got a big problem. You guys need to  
24 reduce operating pressure."

25 That's generally, when we knew there was a

1 problem, the problem was identified and we were told to  
2 reduce operating pressure.

3 You know, it's not like we were looking over  
4 the smart tool informations and telling them. We  
5 always, you know, the pipe was good.

6 Q So the same with Olympic experience? You  
7 can't really answer that question because it --

8 A No. The answer is: Is Olympic more than any  
9 other? To be honest with you, I never worked with  
10 other companies that had informed me as much about work  
11 being done on or near the line and digs and things like  
12 that.

13 Q Am I understanding you correctly that you're  
14 saying that, as a controller, you were more often  
15 informed of work on the pipeline for Olympic than you  
16 were for Mobile?

17 A Yes.

18 Q Is that the same as saying that Olympic  
19 performed more work? Or are you saying you were more  
20 informed or they performed more work?

21 A It may be strictly, if I'm hearing you right,  
22 I think it would be the previous, that I was more  
23 informed, you know.

24 And it could very well be the nature of the  
25 fact that a lot of the other systems were in locations

1 that weren't as wet. We had some pretty amazing years  
2 with land movement and such on this system.

3 You know, this is a rather unique environment  
4 up here. So maybe that's part of it, too.

5 Q That was thoughtful, well-answered.

6 What did the controllers do on downtime or  
7 slow time that they had between products in the control  
8 room?

9 A There really wasn't much down or slow. But  
10 I'll tell you what. If a line was basically in an  
11 operational state and things were slow, we always  
12 helped one another, you know.

13 That is the beauty of the tandem operation,  
14 is to be able to say, "Hey, what do you think? I got  
15 this going on. What do you think?"

16 You know, and it's a really neat dynamic to  
17 be able to bounce ideas off of one another and  
18 brainstorm together. And when you solve things, it's  
19 nice. But, not always possible.

20 There are times in there when it's all each  
21 guy can do to run his line.

22 Q Do you have in the control a TV or a radio or  
23 exercise equipment?

24 A At that point in time, we had a radio, and we  
25 had a Nordic track and some exercise equipment, yes.

1 Q You said at that time. Is it still there?

2 A No. Equilon deemed it inappropriate and  
3 moved it out.

4 MS. IMHOF: That's all my questions. Thanks.

5 INVESTIGATOR BESHORE: Geoff.

6 MR. SMYTH: I just have one trying to  
7 reclarify here. In and out of the control room,  
8 because you've had Ron Burke discuss the fact that  
9 Kevin didn't leave the control room.

10 BY MR. SMYTH:

11 Q When you were moving from the computer room  
12 to control room, was he always -- Kevin -- was he  
13 always at his terminal that you remember?

14 A My recollections are that he's always at his  
15 terminal, with the exception of him coming into the  
16 computer room and asking if it's okay to restart.

17 Q So you physically remember him there the two  
18 times that you walked through to look at the screens,  
19 he was --

20 A Yeah. My recollection is that he was in  
21 there. I don't recall him being gone.

22 MR. SMYTH: Thanks.

23 MR. TIEKEN: You bet.

24 INVESTIGATOR BESHORE: Jim, did you have some  
25 questions?

1 MR. CASH: I just have one more.

2 BY MR. CASH:

3 Q You had said earlier that the only deletions  
4 that you had done was to remove the two records that  
5 you had put in.

6 A That is correct.

7 Q There wouldn't be any reason for you to  
8 remove any other VMS files, VMS data files, records?

9 A No, sir.

10 Q And as far as you know, nobody else did?

11 A Yes. As far as I know, that's the scope of  
12 my knowledge was my deletions initially through the X-  
13 terminal 01 and my supervisor's deletions of the same  
14 records that appeared to have the typo on ~~AL~~, the  
15 stand-alone 02. ?

16 MR. CASH: Okay, thanks.

17 MR. TIEKEN: You bet.

18 INVESTIGATOR BESHORE: I have a couple of  
19 questions here.

20 BY INVESTIGATOR BESHORE:

21 Q First of all, what's a gauge?

22 A A field gauger is or a gauger-- my duties  
23 involve ticketing, meter calibration, tank gauging,  
24 quality testing, automatic custody transfer, lease  
25 oversight, sealing. All of the above.

1 Q Is Wolverine, are they a Mobile pipeline?

2 A I don't believe so. I believe it was  
3 structured similar to Olympic in that there are  
4 multiple ownership with Mobile contracting the  
5 operation of the system.

6 Q So when you were operating the Wolverine  
7 system, you were a Mobile employee; is that correct?

8 A That is correct.

9 Q You mentioned, too, the other places you've  
10 been in terms of the tandem operation was not --  
11 anywhere else you had ever been had you ever run across  
12 that. And to me implies more than Mobile, or is there  
13 other companies you've worked for as a controller?

14 A No. Just Mobile but in different  
15 environments. When I worked initially for Mobile, I  
16 was the controller at Torrence refinery. And there was  
17 one per shift all by ourselves.

18 When I moved down and became a controller  
19 again for Mobile in Dallas in U.S. operations, there  
20 were multiple segregated consoles operating their  
21 national network so you could walk down the hall and,  
22 you know, see any system was rather unique.

23 You know, so I could go see like the Banger  
24 system up or the Wolverine system or the Octopus  
25 gathering system for the ethanes and butanes for that



1 type of system, you know. All kinds of systems.

2 Q You mentioned, too, that in terms of the  
3 addition of the containers for the archiving of the  
4 data pools. And you were talking about the work that  
5 you did with the SCATA<sup>D</sup> software package.

6 And I think you said something to the effect  
7 that we needed to remember that what you were doing was  
8 really basic stuff, that it shouldn't affect the  
9 functionality of the software package.

10 Is that something you had mentioned today?

11 A Yes, sir. I believe that to be true.

12 Q And yet we're saying also, or people are  
13 saying that the subsequent computer slowdown and  
14 failure was a result of things that you were doing with  
15 that understanding in mind with the software.

16 I guess my question to you is do you believe  
17 that? That the changes you were making was the result  
18 of this computer?

19 A Do you mean caused or precipitated, or  
20 caused, had a hand in this failure?

21 Q Yes.

22 A I don't believe the work that I did caused  
23 the problem. I believe that it's a coincidence.  
24 That's my gut feeling.

25 Q So you think something else caused this

1 problem and it just happened at the same time  
2 coincident to what you were doing?

3 A Yes. It may very well have been something  
4 invisible to me, something as simple as tapping a key  
5 at an inappropriate time.

6 You know, I don't know. You wouldn't think  
7 so. Who knows? But, all I can do is sit here and tell  
8 you that I went over that record three times plus. And  
9 it was right.

10 And when it came back and it looked corrupt  
11 on the other machine, when and where that happened, I  
12 don't know. I don't think -- I don't believe even the  
13 experts could tell you.

14 Q Well, as far as you know, this was never  
15 recreated? I mean, this type of failure was never --  
16 let me stop it there.

17 A Yeah.

18 Q But they never were able to reproduce this  
19 event in any way, shape or form?

20 A That's the way I understand it. Even  
21 following what I have done. I'm assuming they followed  
22 what I have done to my steps to have created it.

23 But, it's never been replicated. I mean,  
24 honestly, I would like to know what happened as much as  
25 anyone.

1 Q Would anybody else have been doing anything  
2 in that system potentially, unrelated to what you were  
3 doing, that might have caused -- I mean I want to make  
4 sure I understand who had access to get in there and  
5 actually do something. You. And do you know who else  
6 it might have been?

7 A I knew Ron Brenson<sup>†</sup> did. I knew Todd Smith  
8 did. They are the only two that I was -- maybe David  
9 Johnson also.

10 Q Who is David?

11 A He's in the accounting side of things. He  
12 may have had access to it. But -- and there is another  
13 program where information is brought out from the  
14 system that -- no, that's not related -- that the  
15 accounting people use.

16 But they would be the only ones that I'm  
17 aware of.

18 Q I mean you're not aware of anything that  
19 these other people were doing? I mean, well, let me  
20 rephrase that.

21 Are you aware of any of them doing anything  
22 in the system at this particular time? If they were,  
23 you're not aware of it?

24 A Yeah. I don't believe that security was an  
25 issue there. I believe that, you know, so few people.

1 And everybody had a respect for what it was and what it  
2 did. So people didn't just, "Gee, I'm going to play  
3 with the computer."

4 So, yeah, none that I'm aware of.

5 Q No, I wasn't meaning to...

6 A I understand.

7 Q But, essentially, somebody could be in there  
8 inadvertently doing something?

9 A They could. They could.

10 Q And caused something to happen and somebody  
11 else would --

12 A And, really, I would have to ask you, if you  
13 want the best answer to that, Todd would be the man to  
14 ask.

15 Q And the exercise equipment, you said that's  
16 gone. That it was inappropriate?

17 A Yes.

18 Q Right after the accident, or was that--

19 A Right, when Carl ~~Guest~~ came in. **GAST**

20 Q So that was Carl's.

21 A And I believe his impression, he felt that it  
22 may be -- my feel is that it was an issue of public  
23 relations. That it may not look good if cameras come  
24 in the control center and here's exercising going on in  
25 light of this beating we've been getting since June 10.

1 Q Just in your viewpoint was it inappropriately  
2 used as far as you could tell?

3 A Not at all. I believe it's a good thing.  
4 You stimulate the blood flow, you know, in the middle  
5 of the night. It's good for you. Exercise, we all  
6 know it's good for you.

7 And if there is an opportune time, if there  
8 is a one or two window when segment 1 was down and that  
9 guy couldn't bring himself up and do it. I believe  
10 it's a good thing.

11 Q Could you hear the audio alarms from Point  
12 Track?

13 A You could stand right there and work out on  
14 it and watch your screens.

15 Q You can see your screens?

16 A See your screens, yes.

17 INVESTIGATOR BESHORE: Does anybody else have  
18 any questions?

19 (No response.)

20 INVESTIGATOR BESHORE: Just the final  
21 question.

22 Is there anything else that we haven't asked  
23 you about that you're aware of, or that others asked  
24 you about that you feel we should know in order to  
25 complete this investigation?

1 MR. TIEKEN: I would have to say that you've  
2 pretty much covered it all. I can't think of anything.

3 INVESTIGATOR BESHORE: Thank you.

4 We'll go off the record. Thank you.

5 MR. TIEKEN: You're welcome.

6 (Whereupon, at 5:10 p.m., the interviews were  
7 concluded.)

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REPORTER'S CERTIFICATE

This is to certify that the attached proceedings before: NTSB

In the Matter of:

PIPELINE ACCIDENT

were held as herein appears and that this is the original transcript thereof for the file of the Department, Commission, Administrative Law Judge or the Agency.

EXECUTIVE COURT REPORTERS, INC.  
1320 Fenwick Lane, Suite 702  
Silver Spring, MD 20910  
(301) 565-0064

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Official Reporter

Dated: OCTOBER 2000



# National Transportation Safety Board

Washington, D.C. 20594

In the Matter of the National Transportation Safety  
Board Investigation of the Pipeline Accident Occurring  
in Bellingham, Washington, on June 10, 1999.

---

## COMPULSION ORDER

It appearing to the satisfaction of the Chairman of the National Transportation Safety Board:

1. That Lloyd Tieken has been called to testify or provide other information in this matter;
2. That Lloyd Tieken has refused or is likely to refuse to testify or provide other information, on the basis of his privilege against self-incrimination;
3. That in the judgment of the Chairman of the National Transportation Safety Board, the testimony or other information from Lloyd Tieken may be necessary to the public interest; and
4. That this order has been issued with the approval of the Attorney General or her designated representative, pursuant to 18 USC Section 6003 and 28 CFR Section 0.175.

NOW, THEREFORE, IT IS ORDERED, pursuant to 18 USC Section 6002 and 6004, that Lloyd Tieken appear and give testimony or provide other information which he has refused or is likely to refuse to provide or give on the basis of his privilege against self-incrimination as to all matters about which he may be questioned in this matter.

IT IS FURTHER ORDERED that in accordance with the provisions of 18 USC Section 6002, Lloyd Tieken shall forever be immune from the use of such testimony or information or any information directly or indirectly derived from such testimony against him in any prosecution, penalty or forfeiture, either State or Federal or otherwise; but the witness shall not be exempt from prosecution for perjury, giving a false statement or contempt committed while giving testimony or producing evidence under this order.

Dated this 12th day of September, 2000.

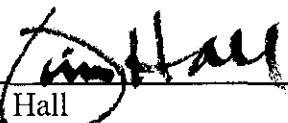
  
\_\_\_\_\_  
Jim Hall  
Chairman

Exhibit Tieken #1



IN THE SUPERIOR COURT FOR THE STATE OF WASHINGTON  
IN AND FOR THE COUNTY OF WHATCOM

KATHERINE DALEN, individually  
and as the Personal  
Representative of the Estate  
of STEPHEN M. TSIORVAS, and as  
Guardian ad Litem for ANDREW  
R. TSIORVAS and GEORGE K.  
TSIORVAS; and KYRIACOS  
TSIORVAS,

Plaintiffs,

vs.

OLYMPIC PIPE LINE COMPANY, a  
foreign corporation, EQUILON  
PIPELINE COMPANY, LLC, a  
foreign corporation, EQUILON  
ENTERPRISES, LLC, a foreign  
corporation; and FRED  
CROGNALE, FRANK HOPF, RON  
BRENTSON and JOHN DOES,

Defendants.

OLYMPIC PIPE LINE COMPANY, a  
foreign corporation, EQUILON  
PIPELINE COMPANY, LLC, a  
foreign limited liability  
company; and EQUILON  
ENTERPRISES, LLC, a foreign  
limited liability company,

Third-Party Plaintiffs,

v.

IMCO GENERAL CONSTRUCTION CO.,  
a domestic corporation, and  
JOHN DOE DEFENDANTS ONE  
THROUGH FOUR,

Third-Party Defendants.

NO. 99-2-01468-1

DEPOSITION UPON ORAL  
EXAMINATION

LLOYD TIEKEN  
VOLUME I

Taken at

701 Fifth Avenue  
Seattle, Washington

REPORTED BY: Katie McCoy,  
RPR, CSR

DATE TAKEN: August 30, 2000

2

FRANK S. KING, as the  
Personal Representative of the  
Estate of WADE B. KING, and  
FRANK S. KING and MARY L.  
KING, individually, and TRACY  
K. BELL, individually, and  
JASON KING, individually,

Plaintiffs,

vs.

NO. 99-2-01467-3

OLYMPIC PIPE LINE COMPANY, a  
foreign corporation, EQUILON  
PIPELINE COMPANY, LLC, a  
foreign corporation, EQUILON  
ENTERPRISES, LLC, a foreign  
corporation, and FRED  
CROGNALE, FRANK HOPF, RON  
BRENTSON and JOHN DOES,

Defendants.

OLYMPIC PIPE LINE COMPANY, a  
foreign corporation, EQUILON  
PIPELINE COMPANY, LLC, a  
foreign limited liability  
company; and EQUILON  
ENTERPRISES, LLC, a foreign  
limited liability company,

Third-Party Plaintiffs,

vs.

IMCO GENERAL CONSTRUCTION CO.,  
a domestic corporation, and  
JOHN DOE DEFENDANTS ONE  
THROUGH FOUR,

Third-Party Defendants.

KATIE MCCOY, RPR, CSR  
10020-A Main Street, Suite 273  
Bellevue, Washington 98004  
(206) 622-6897

KATIE MCCOY, RPR, CSR 08/30/00 Page 2 of 239  
(206) 622-6897

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APPEARANCES:

For the Plaintiffs  
Tsiorvas and King: DAVID BENINGER  
Luvera, Barnett, Brindley,  
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For the Defendant  
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For the Defendant  
Brentson: LAURENCE FINEGOLD  
Attorney at Law  
1809 7th Avenue  
Suite 1301  
Seattle, WA 98101

(CONTINUED)

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KATIE MCCOY, RPR, CSR 08/30/00 Page 3 of 239  
(206) 622-6897

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APPEARANCES (Continued):

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Crognales: MICHAEL R. SPAAN  
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1031 West 4th Avenue  
Suite 504  
Anchorage, AK 99501

For the Defendant  
Imco: DOUGLAS WEIGEL  
Floyd & Pflueger  
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Suite 300  
Seattle, WA 98121-1445

For Mr. Tiekens: MICHAEL MARTIN  
Siderius Lonergan  
847 Logan Building  
500 Union Street  
Seattle, WA 98101

Also Present: Bob Davis

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KATIE MCCOY, RPR, CSR 08/30/00 Page 4 of 239  
(206) 622-6897

INDEX OF EXAMINATION

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INDEX OF EXHIBITS

Table with 3 columns: NO., DESCRIPTION, PAGE/LINE. Includes items like Notice of Videotape Deposition of Lloyd Tiekem, Offer of Employment for Mr. Tiekem, etc.

(LLOYD TIEKEN - BY MR. BENINGER)

List of names and affiliations: Line Company, MR. WOLFE: John Wolfe for Frank Hopf, MR. SPAAN: Mike Spaan for Fred Crognale, MR. FLATIS: Damon Flatis, Platiss Law Firm, Kyriacos Tsiorvas, MR. VERWOLF: Nick Verwolf of Davis Wright Tremaine for the Equilon entities, MR. FINEGOLD: Larry Finegold on behalf of Ron Brentson, MR. WEIGEL: Doug Weigel on behalf of Imco General Construction.

LLOYD TIEKEN, witness herein, being first duly sworn on oath, was questioned and testified as follows:

EXAMINATION

BY MR. BENINGER:
Q Good morning, Mr. Tiekem. Am I pronouncing your last name right?
A Yes.
Q Will you please state your name and spell your last name for the record.
A Lloyd Harrison Tiekem, Jr. T-I-E-K-E-N.
Q Your home address is what, sir?
A [Redacted]

SEATTLE, WASHINGTON: WEDNESDAY, 30, 2000

9:41 A.M.

--ccOco--

MR. DAHL: This is the video portion, videotaped portion in the deposition of Lloyd Tiekem. My name is Steve Dahl. I am the videographer from Pro Video Seattle located at 80 South Washington, Suite 200, in Seattle, Washington, 98104.

This deposition is being recorded this 30th day of August, 2000, and we are at 701 Fifth Avenue, the 59th floor, in Seattle, Washington, and the time is approximately 9:42 a.m.

This deposition is being recorded in the matter of Katherine Dalen, et al., vs. Olympic Pipe Line Company, et al., Case No. 99-2001468-1, in the Superior Court of the State of Washington, County of Whatcom, and was noticed by David M. Beninger.

Will counsel please identify themselves for the record and will the court reporter please swear in the witness.

MR. BENINGER: David Beninger on behalf of the plaintiffs.

MR. MARTIN: Michael Martin appearing for Mr. Tiekem.

MR. ALLEN: Richard Allen for Olympic Pipe

(LLOYD TIEKEN - BY MR. BENINGER)

Q Telephone number?
A [Redacted]
Q Who are you currently employed by?
A Olympic Pipe Line Company.
Q In what capacity?
A Pipeline control.
Q Are you located out of the Renton headquarters?
A I am, though actually I'm employed by British Petroleum now.
Q BP has taken over the management of the pipeline, correct?
A Correct, and we have actually become an employee -- I am an employee of British Petroleum.
Q Did that happen sometime after July 1?
A Yes.
Q Back on June 10th, 1999, which is what I'll be here to talk to you about in particular, were you working at the Renton Control Center?
A Yes.
Q Were you there on the day of the rupture and the explosion?
A Yes.
Q What was your title at that point in time?
A Pipeline controller.
Q Who else was with you in the Control Center at that

1 time on June 10th, 1999?  
 2 A I was not in the Control Center.  
 3 Q Where were you?  
 4 A I was on special assignment in the computer room.  
 5 Q What was the special assignment?  
 6 A SCADA support and training.  
 7 Q Which meant you were doing what?  
 8 A Support with the software.  
 9 Q What do you mean by support? Were you holding it up?  
 10 Were you helping to fix it? Were you maintaining it?  
 11 What were you doing?  
 12 A Specifically?  
 13 Q Yes, sir.  
 14 A Specifically which?  
 15 Q You had a special assignment. What was that special  
 16 assignment requiring you to do? I mean I understand  
 17 the job title, but what were you doing?  
 18 A As SCADA support I was primarily creating PIC files.  
 19 Q Which means what?  
 20 A A PIC file is an end user display that the pipeline  
 21 controller utilizes to operate the pipeline.  
 22 Q Were you doing the work on the SCADA system yourself  
 23 or were you under somebody's supervision?  
 24 A I was under -- I was actually working together with  
 25 Todd Smith.

(LLOYD TIEKEN - BY MR. BENINGER)

1 Q Who was the company attorney that you met with?  
 2 A Dick Allen.  
 3 Q And the videotape, is that something you saw here or  
 4 where was that?  
 5 A It was at their facility at their office.  
 6 Q And did you bring a copy of the video with you?  
 7 A No.  
 8 Q How long did you meet with, in preparation for the  
 9 deposition, with either your attorney or your attorney  
 10 and Olympic Pipe Line's attorney?  
 11 A About ten hours.  
 12 Q Why so long?  
 13 A I had a lot of questions. I've never done this  
 14 before.  
 15 Q You went through a Grand Jury proceeding, correct?  
 16 A Yes.  
 17 Q You testified for how long before the Grand Jury?  
 18 A Maybe two hours. Maybe. Maybe longer.  
 19 Q Had you met with the U.S. attorneys before testifying  
 20 before the Grand Jury?  
 21 A Yes.  
 22 Q How long did you meet with them?  
 23 A Approximately 16 plus hours.  
 24 Q Did you take notes or have any notes taken of either  
 25 of these meetings, either the ones you went through

1 Q Was Mr. Smith another operations controller?  
 2 A At that point in time he was.  
 3 Q What was he before and after that?  
 4 A Before -- well, I don't know what he was before.  
 5 After, he is now a system engineer.  
 6 Q What systems is he engineering for?  
 7 A The SCADA system.  
 8 Q I'm going to back up and I'll come in touch with a lot  
 9 of these in quite a bit more detail. We'll spend some  
 10 time talking about some things, but what have you done  
 11 to prepare for your deposition?  
 12 A I have watched a videotape on a deposition proceeding.  
 13 I've met with my attorneys, or my attorney and the  
 14 company's attorney, and just discussed the process.  
 15 Q Who is your attorney?  
 16 A Michael Martin.  
 17 Q And is Mr. Martin a family, longtime family attorney  
 18 for you or was he hired specifically after this June  
 19 10th, 1999, rupture and explosion?  
 20 A One question, please.  
 21 Q Sure. How did Mr. Martin become your attorney?  
 22 A Post June 10th.  
 23 Q Is this somebody you hired or is it paid for by the  
 24 Olympic Pipe Line?  
 25 A Paid for by the company.

(LLOYD TIEKEN - BY MR. BENINGER)

1 with Mr. Allen and Olympic Pipe Line or the ones with  
 2 the U.S. attorneys?  
 3 A No.  
 4 (Exhibit No. 217 was marked.)  
 5 Q Did you bring anything today in response to the  
 6 subpoena which I've marked as Exhibit 217?  
 7 A Yes.  
 8 Q Will you provide that to me, please, sir?  
 9 MR. MARTIN: I've got three documents for  
 10 you, David. I've got -- in response to the subpoena  
 11 you asked for offers of employment, and I think  
 12 there's enough copies here for everyone to pass them  
 13 around. That's the first one. That's the offer made  
 14 by BP.  
 15 MR. BENINGER: What I'll do is mark that as  
 16 Exhibit 218.  
 17 (Exhibit No. 218 was marked.)  
 18 Q I'll show you what's marked as Exhibit 218. Do you  
 19 recognize what that is, sir?  
 20 A I do.  
 21 Q What is that?  
 22 A That is an offer of -- it was an offer of employment  
 23 from British Petroleum for pipeline controller.  
 24 Q Same position, just different company, correct?  
 25 A Correct.

1 Q And this would take effect, does it say on here?

2 A August 15th, 2000. I don't know if it says it here.

3 Q Is this the same salary that you had before or did you

4 get a pay raise as well?

5 A My salary has not -- actually, my salary has not been

6 determined as of yet.

7 Q They put something down in here -- is that still -- of

8 [REDACTED] the annual salary. Is that still under

9 negotiation then?

10 A It is. I accepted this as is, but I intend to

11 negotiate.

12 Q I assume upper; is that right?

13 A I would hope so.

14 Q Is that [REDACTED] the salary that you left off with at

15 Olympic Pipe Line or is it lower?

16 A It's, it's the same base rate. However, a

17 provision -- it's -- excuse me. What I meant to say

18 is it's the same.

19 Q Okay. It's a long way of getting at it. It's the

20 same, correct?

21 A Correct.

22 Q There were a couple other --

23 MR. MARTIN: The second document you asked

24 for, documents regarding immunity, and the first one

25 is a letter dated April 20th, 2000, from the United

1 for this deposition. The last, it's a letter dated

2 August 29th, 2000, from the government to me regarding

3 immunity provided by the government for purposes of

4 this deposition.

5 (Exhibit No. 220 was marked.)

6 Q Showing you Exhibit 220, is that a copy of the letter

7 referenced by your counsel from the government to

8 Mr. Martin, your current attorney?

9 A Yes.

10 Q And it basically states that the deposition that you

11 give today and the testimony will not be used against

12 you, either directly or indirectly, in any criminal

13 case being brought by the U.S. Attorney's Office,

14 correct?

15 A Yes.

16 MR. MARTIN: David, I forgot. I've got two

17 other documents here.

18 MR. BENINGER: Okay.

19 MR. MARTIN: The first is a document created

20 by Mr. Tiekens on June 10th when he tried to recap the

21 events that took place. The second is a list,

22 handwritten list, essentially of the same thing, and I

23 don't believe I've got copies for everybody. I've got

24 several here. We can have some more made.

25 (Exhibit No. 221 was marked.)

1 States to Richard Tallman who was previous counsel for

2 Mr. Tiekens.

3 (Exhibit No. 219 was marked.)

4 Q I'll show you what I've marked as Exhibit No. 219. Do

5 you recognize what that is?

6 A Yes.

7 Q This was written to your former attorney, Mr. Richard

8 Tallman; is that correct?

9 A Yes.

10 Q And he was the attorney hired by Olympic Pipe Line for

11 you after the June 10th, 1999, rupture and explosion?

12 A Yes.

13 Q And it was after this date of April 20th, 2000, that

14 you provided testimony to the Grand Jury?

15 A Yes.

16 Q When was that testimony?

17 A I don't recall specifically.

18 Q Within the last month or at the early part of the

19 summer?

20 A Earlier in the year.

21 Q Before now and after April 20th, correct?

22 A Correct.

23 Q The next exhibit is what?

24 MR. MARTIN: The last is a letter dated

25 yesterday from the government to me regarding immunity

1 MR. MARTIN: Probably do those as two

2 separate exhibits, I would guess. The top page and

3 then the last two pages.

4 (Exhibit No. 222 was marked.)

5 MR. ALLEN: You've marked the top page 221?

6 MR. BENINGER: Correct.

7 Q So let me show you Exhibit No. 221, and up at the top

8 there it has June 10, '99, up at the very top. Would

9 you explain what that document is, please?

10 A It's a recap of the actions that I took while working

11 in the computer room.

12 Q On June 10th, 1999?

13 A On June 10th, 1999.

14 Q Was this put together as part of an emergency log or

15 is it something different?

16 A No, it was just -- it was a personal document that I

17 created to remind myself of the actions I took on that

18 day of the action, of the incident.

19 Q Did you put this together on June 10th, 1999?

20 A I did.

21 Q And when abouts was that?

22 A I don't recall.

23 Q Was it done on your computer at home or at work?

24 A It was done on the computer at work and saved to a

25 floppy disk.

1 Q Did you prepare an Emergency Log?  
 2 A No.  
 3 Q Do you know what I'm talking about by an Emergency  
 4 Log?  
 5 A More specifically, please?  
 6 Q Yeah. I think that's the name of the document, is an  
 7 Emergency Log that controllers are supposed to put  
 8 together following any emergency or abnormal  
 9 situation.  
 10 A No.  
 11 Q No, you didn't prepare one?  
 12 A No, I did not.  
 13 Q You do understand what I'm talking about though,  
 14 correct?  
 15 A Yes.  
 16 Q And is the, quote, "Emergency Log", is that the right  
 17 designation for that?  
 18 A Yes, I believe.  
 19 Q Do you know if anybody put together an Emergency Log?  
 20 A No.  
 21 Q Is an Emergency Log something that is supposed to be  
 22 prepared by a controller following an emergency?  
 23 A Yes.  
 24 Q Do you know why that wasn't done in this case?  
 25 MR. VERWOLF: Objection. Said he didn't

(LLOYD TIEKEN - BY MR. BENINGER)

1 question.  
 2 A Yes.  
 3 Q And what's the purpose of an Emergency Log?  
 4 A To document the event.  
 5 Q Why?  
 6 A For a record.  
 7 Q Why do you need a record?  
 8 A Can you be more specific?  
 9 Q Sure. You're got computer printouts and you've got  
 10 people's memory and all sorts of other things going  
 11 on. Why do you need a specific record termed an  
 12 Emergency Log?  
 13 A I believe it would be, you know, just the formal  
 14 process, part of the formal process.  
 15 Q Is there a substance to that form as to why you're  
 16 doing it?  
 17 A There is a structure, yes.  
 18 Q And is one of the reasons that you're doing it so that  
 19 you can have things put down in one area as to the  
 20 events that occurred so that in case people's memories  
 21 fade or something happens to somebody, there's some  
 22 recording as to the events that were made at the time  
 23 contemporaneous with it?  
 24 A Yes.  
 25 Q And your position as a controller -- let me back up.

1 know.  
 2 MR. ALLEN: Join the objection.  
 3 A No.  
 4 Q Have you had any discussions with anybody about either  
 5 preparing one or why it wasn't prepared, the Emergency  
 6 Log, in this case?  
 7 A No.  
 8 Q Who is responsible for ensuring that an Emergency Log  
 9 is prepared following an emergency?  
 10 A Ron Brentson.  
 11 Q And what's his position?  
 12 A Control Center supervisor.  
 13 Q Why is he responsible for ensuring that an Emergency  
 14 Log is prepared?  
 15 MR. VERWOLF: Objection, no foundation.  
 16 A As supervisor, ultimately the actions of the Control  
 17 Center fall under him.  
 18 Q So as a Control Center supervisor, his job is to  
 19 ensure that the controller in charge during an  
 20 emergency prepares an Emergency Log; is that correct?  
 21 A Yes.  
 22 Q And is the controller in charge during the emergency  
 23 also required on their own to prepare the Emergency  
 24 Log?  
 25 MR. ALLEN: Object to the form of the

(LLOYD TIEKEN - BY MR. BENINGER)

1 Is an Emergency Log required by all controllers to be  
 2 made following an emergency?  
 3 MR. VERWOLF: Objection, no foundation.  
 4 MR. ALLEN: Join the objection, no  
 5 foundation.  
 6 A Yes.  
 7 Q How do you know that?  
 8 A As a controller it is part of my routine.  
 9 Q We had some of these folks say that you didn't have a  
 10 foundation or an understanding as to why a controller  
 11 would have to prepare an Emergency Log so I'm trying  
 12 to lay a foundation with you as to how would you know  
 13 the controllers are supposed to prepare an Emergency  
 14 Log following an emergency?  
 15 A Routine.  
 16 Q It was part of your training?  
 17 A Yes.  
 18 Q Was it part of the standard practices and procedures  
 19 that you were trained in and expected to follow at  
 20 Olympic Pipe Line?  
 21 A Yes.  
 22 Q And it's something that you would have learned, not  
 23 only in your direct training, but also in watching and  
 24 observing other co-workers in carrying out their job  
 25 functions as well, correct?

1 A Could you repeat that, please?  
 2 Q Sure. Not only is it from your direct training that  
 3 you know an Emergency Log is supposed to be completed  
 4 by every controller during an emergency, or following  
 5 an emergency rather, but also from observing and  
 6 working with other co-workers, you understand that  
 7 this is a requirement as well, correct?  
 8 A I understand from my training, period.  
 9 Q Why didn't you make an Emergency Log following this  
 10 occurrence?  
 11 A I was not in the Control Center.  
 12 Q The Emergency Log is only required of people in the  
 13 Control Center?  
 14 A Yes.  
 15 Q Who was in the Control Center on June 10th, 1999?  
 16 A Kevin Dyvig, Dave Smith, Ron Burt.  
 17 Q And who was their supervisor?  
 18 A Ron Brentson.  
 19 Q Back in June, 1999, what was the job title for Kevin  
 20 Dyvig?  
 21 A Operations Controller 2.  
 22 Q The job title for Dave Smith?  
 23 A Operations Controller.  
 24 Q The job title for Ron Burt?  
 25 A Operations Controller.

1 Q Does somebody normally monitor the health of the  
 2 machine?  
 3 A Yes.  
 4 Q Who's normally in charge of that?  
 5 A Todd Smith.  
 6 Q When Todd Smith is off duty, who fills in to monitor  
 7 the health of the machine?  
 8 A I do.  
 9 Q I thought you were just on special assignment at that  
 10 time?  
 11 A I was.  
 12 Q When you're not -- how long had you been on special  
 13 assignment?  
 14 A Off and on, approximately eight months.  
 15 Q Who did you replace?  
 16 A No one.  
 17 Q Before you were put on special assignment, was there  
 18 anyone responsible for monitoring the health of the  
 19 machine?  
 20 A Yes.  
 21 Q Who was that?  
 22 A Todd Smith.  
 23 Q Alone?  
 24 A Yes.  
 25 Q And who would monitor the health of the machine when

1 Q And Ron Brentson was a Control Center supervisor,  
 2 correct?  
 3 A Correct.  
 4 Q Where are the SCADA facilities located in connection  
 5 with the Control Center?  
 6 A Approximately 20 steps out through secure doors and in  
 7 through a secure door.  
 8 Q Part of the same facility but not part of the actual  
 9 Control Center; is that right?  
 10 A Correct.  
 11 Q And in the, working in the SCADA facility at the time  
 12 of the rupture and explosion were yourself and Todd  
 13 Smith; is that right?  
 14 A Repeat that, please?  
 15 Q Sure. At the time of the rupture and explosion in the  
 16 afternoon from, let's say 3:00 to 5:00 p.m. on June  
 17 10th, 1999, who was in the SCADA area?  
 18 A Me.  
 19 Q You alone?  
 20 A Yes.  
 21 Q Other than creating PICs, were you doing anything else  
 22 with the SCADA program itself at that time period?  
 23 A Yes.  
 24 Q What else were you doing?  
 25 A Monitoring the health of the machine.

1 he was off duty?  
 2 A Ron Brentson.  
 3 Q That was one of his job duties in addition to being  
 4 Control Center supervisor?  
 5 A As far as I know.  
 6 Q What does one do when they monitor the health of the  
 7 machine?  
 8 A There's a command line that you can invoke that's  
 9 integrated with the software package that Vector  
 10 software has, and you just type the letters E-S-E-A  
 11 and hit enter, and this spawns a reporting process.  
 12 Q Sort of like an internal diagnostic?  
 13 A Yes.  
 14 Q ESEA stands for what?  
 15 A Error -- basically -- I don't know.  
 16 Q You don't know what the acronym means?  
 17 A I don't.  
 18 Q It didn't stand for I don't know? Just error and some  
 19 other things, right?  
 20 A Yes.  
 21 Q Now, when you type in ESEA, how often would you do  
 22 this?  
 23 A Several times a day.  
 24 Q Any routine set up?  
 25 A Random. No routine. First thing in the morning when

1 you come in because the machines have been unmonitored  
2 overnight.

3 Q What sort of information does the ESEA tell you then?  
4 A Whether errors are being generated.  
5 Q Errors as in the computer's making errors?  
6 A I'm no expert on this specific software piece.  
7 Q But you were one of the only two people who was  
8 responsible for monitoring the health of the machine  
9 though, correct?  
10 A Correct.  
11 Q And the only tool you really had to monitor it was  
12 this ESEA designation that spits out information,  
13 correct?  
14 A Correct.  
15 Q So given the -- what kind of training did you have  
16 then to be a monitor of the health of this machine?  
17 A Mentoring and on-the-job training.  
18 Q Mentoring means what?  
19 A Todd Smith and I work together.  
20 Q Is that basically the same as on-the-job training?  
21 A Yes.  
22 Q And so how long did you go through a training program  
23 then, the OJT, to learn how to monitor the health of  
24 the SCADA machine?  
25 A Ongoing. As often as I was in there I was training.

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(LLOYD TIEKEN - BY MR. BENINGER)

1 A No.  
2 Q No tests or anything like that performed?  
3 A No.  
4 Q Did you feel after eight months of OJT on monitoring  
5 the health of the machine that you were qualified to  
6 be able to monitor and interpret the data to determine  
7 the health of the machine?  
8 A Yes.  
9 Q What was the health of the machine on June 10th, 1999?  
10 A More specifically when?  
11 Q Let's say --  
12 A It started fine.  
13 Q Did anything change with the health of the machine --  
14 by start, when you come on shift to start  
15 monitoring the health of the SCADA machine on June  
16 10th?  
17 A Approximately 7:00 a.m.  
18 Q And you ran an ESEA internal diagnostic on the health  
19 of the machine at that time?  
20 A Yes.  
21 Q And what did the results tell you?  
22 A That the machine was healthy.  
23 Q Did anything change throughout the day?  
24 A Yes.  
25 Q And how?

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1 Q And Todd Smith, did he go to some special school or  
2 something to learn how to monitor the health of the  
3 machine?  
4 A I don't know.  
5 Q Did you get handouts or booklets, or any specialist  
6 come in to teach you about how to monitor the health  
7 of the machine?  
8 A We have manuals, yes.  
9 Q Is there a manual -- what would it be called that  
10 would teach you how to monitor the health of the SCADA  
11 machine?  
12 A There are a number of them. There are -- there are  
13 several.  
14 Q Just give me whatever names you know.  
15 A Inside SCADA. Inside Vector.  
16 Q Are those two magazines or one?  
17 MR. ALLEN: Object to the form of the  
18 question.  
19 A It's a binder, three-ring binder.  
20 Q Is it one binder though?  
21 A There are numerous binders. Inside Vector is one.  
22 Introduction to Vector is another. There are specific  
23 volumes on each aspect of this software property.  
24 Q Were you checked off on your understanding and  
25 knowledge of monitoring of the health of the machine?

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(LLOYD TIEKEN - BY MR. BENINGER)

1 A Errors were generated later after I had performed a,  
2 an addition of a historical record.  
3 Q Was that part of your job duties, to add historical  
4 records?  
5 A Yes.  
6 Q And what year was the training data designed for the  
7 SCADA system?  
8 A I don't understand.  
9 MR. ALLEN: Object to the form of the  
10 question. Foundation.  
11 Q These booklets and things that you were given to learn  
12 how to monitor and interpret the results of the ESEA  
13 on the SCADA system, what year was that information  
14 put together?  
15 A I don't know.  
16 Q Do you know if it was up to date or out of date?  
17 A I don't know. It appeared to be up to date.  
18 Q Why do you say that?  
19 A The information in the manuals applied to the work I  
20 was doing.  
21 Q Do you know when the last time was that the SCADA  
22 system -- actually, when was the SCADA system put into  
23 service; do you know?  
24 A Not specifically, no.  
25 Q Do you know when the last time any upgrades had been

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1 made to the SCADA system before June 10th, 1999?  
 2 A Yes. The SCADA software was upgraded by Todd Smith  
 3 approximately October or November, 1998.  
 4 Q How about the hardware?  
 5 A Approximately December, January, 1998, 1999. The  
 6 memory capacity was increased.  
 7 Q By how much?  
 8 A To maximum, which I believe is 256K on these models.  
 9 Q Was the SCADA system state of the art?  
 10 MR. ALLEN: Object to the form of the  
 11 question. No foundation.  
 12 Q Go ahead.  
 13 A Define state of the art.  
 14 Q Was it -- how do you define state of the art?  
 15 A Brand new, leading technology.  
 16 Q Let's use leading technology. Was the SCADA system  
 17 you had in place on June 10th, 1999, leading  
 18 technology?  
 19 A No.  
 20 Q How do you know that?  
 21 A I am familiar with hardware. It was older.  
 22 Q The hardware was older?  
 23 A Plenty adequate. More than adequate to do the job it  
 24 had to do.  
 25 Q Then why was it upgraded after the occurrence?

1 A No.  
 2 Q Who else was involved in that?  
 3 A When Equilon Enterprises became involved they had, you  
 4 know, post June 10th, they had people become involved  
 5 with the SCADA side.  
 6 Q And were you included within the discussions and  
 7 determinations as to what was going to be done to  
 8 upgrade the SCADA system 750 percent after the deaths?  
 9 A No.  
 10 Q They didn't include you at all even though you were  
 11 going to be the one responsible for monitoring the  
 12 system?  
 13 A No.  
 14 Q Why not?  
 15 MR. WOLFE: I'm going to object to the form  
 16 of the question. Foundation question.  
 17 A I don't know.  
 18 Q Did you talk with anybody about, hey, look, I'm the  
 19 one that's going to be responsible for monitoring this  
 20 and running this, why am I not included in the  
 21 discussions as to what's going to be done?  
 22 A No.  
 23 Q And from your perspective, did you think anything  
 24 needed to be done following the deaths of these three  
 25 children to upgrade the SCADA system?

1 A After what occurrence?  
 2 Q After the explosion and rupture that we're here about.  
 3 Why was the system upgraded if it was plenty adequate?  
 4 A My answer would be assumptive. Just to add  
 5 additional -- my assumption would be an additional  
 6 margin of error, you know, an additional -- to give  
 7 the machine additional margin for error.  
 8 Q How much was it upgraded after the explosion and  
 9 deaths of three kids?  
 10 MR. ALLEN: Object to the form of the  
 11 question.  
 12 A I understand by 750 percent.  
 13 Q 750 percent?  
 14 A Yes.  
 15 Q And this 750 percent upgrade in the system afterwards,  
 16 you felt that was just to give an additional margin of  
 17 error?  
 18 A I said that would be an assumption on my part. I  
 19 don't know specifically why.  
 20 Q Were you involved at all in any of the decision making  
 21 on upgrading the SCADA machine after the deaths?  
 22 A No.  
 23 Q You and Todd Smith were the only two people assigned  
 24 by Olympic to monitor the health of the SCADA system,  
 25 correct?

1 A No.  
 2 Q You thought it was plenty adequate at the time,  
 3 correct?  
 4 A It appears to be.  
 5 Q Is it now state of the art?  
 6 A No.  
 7 Q Why not?  
 8 A It's -- I don't know.  
 9 Q You do understand what state of the art or leading  
 10 technology would be for a SCADA system, correct?  
 11 A I do.  
 12 Q What are we lacking here to make it state of the art?  
 13 A Well, I don't think state of the art fits in a box,  
 14 personally. You know, I need you to define, so I can  
 15 understand your question, would you define state of  
 16 the art?  
 17 Q You and I have gone through that leading technology,  
 18 and you've also just answered my question that you  
 19 don't believe the current system is state of the art,  
 20 correct?  
 21 A Based on my understanding of what state of the art is,  
 22 no, it is not brand, spanking new.  
 23 Q We didn't talk brand, spanking new, did we, sir? We  
 24 talked leading technology.  
 25 A No. Okay.



1 Q So what are we lacking to make this state of the art  
2 or leading technology currently?  
3 A Repeat that, please?  
4 Q Sure. What --  
5 MR. WOLFE: I'm going to object to the form  
6 of the question in terms of the subjective opinion or  
7 objective characterization.  
8 Q What are we lacking to make this machine, this SCADA  
9 machine that's running the Olympic Pipe Line, state of  
10 the art currently?  
11 A Newer hardware.  
12 Q What type of hardware?  
13 A I don't believe I can accurately answer that question  
14 as I'm not an expert on hardware.  
15 Q Were you involved in any of the discussions on trying  
16 to acquire newer hardware to make the SCADA machine  
17 currently state of the art out there for the safety of  
18 people in western Washington?  
19 A No.  
20 MR. VERWOLF: Object to the form of the  
21 question. No foundation.  
22 MR. ALLEN: Object to the form of the  
23 question. No foundation.  
24 Q Are there any plans to make the SCADA system form of  
25 the art?

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(LLOYD TIEKEN - BY MR. BENINGER)

1 correct?  
2 A No. We have purchased hardware.  
3 Q You've purchased state of the art SCADA hardware,  
4 correct?  
5 A Yes, hardware.  
6 Q And that was purchased, the state of the art SCADA  
7 hardware was purchased through Teledyne Brown?  
8 A No.  
9 Q Who was that purchased through?  
10 A I don't know.  
11 Q What was the reason you were sent to be trained on the  
12 state of the art SCADA system?  
13 A Just for training, to understand the software better.  
14 Q Did you feel the training was helpful?  
15 A Yes.  
16 Q How long was the training course?  
17 A Approximately -- well, I don't know exactly. About  
18 two days.  
19 Q Did you learn a number of new things that you didn't  
20 know before?  
21 A Yes.  
22 Q Through this training did you develop a better  
23 understanding of the SCADA system and how it operates?  
24 MR. ALLEN: Object to the form of the  
25 question.

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1 MR. ALLEN: Object to the form of the  
2 question. No foundation.  
3 A Yes.  
4 Q How do you know that?  
5 A We have purchased state of the art equipment.  
6 Q When?  
7 A First part of 2000, I estimate.  
8 Q Why has it not been installed yet?  
9 A I don't know.  
10 Q Are you going to be involved in the installation?  
11 A I don't know.  
12 Q Are you going to be involved in the monitoring of the  
13 new SCADA system?  
14 A I don't know.  
15 Q Have you been trained in the new SCADA system?  
16 A I have had a very basic introductory training course  
17 on the new SCADA system, yes.  
18 Q Where was that done?  
19 A That was done in Alabama, Huntsville, at Teledyne  
20 Brown's facility.  
21 Q Is Teledyne Brown the one that is providing the state  
22 of the art SCADA system?  
23 A Um, from what I understand, if BP decides to go with  
24 that, yes, Teledyne Brown would be the vendor.  
25 Q You've purchased the state of the art SCADA system,

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(LLOYD TIEKEN - BY MR. BENINGER)

1 MR. FINEGOLD: Object to the form of the  
2 question. Which SCADA system?  
3 MR. ALLEN: Yes, ambiguous.  
4 Q Go ahead.  
5 A Yes.  
6 Q Who else went on the training of the state of the art  
7 SCADA system?  
8 A Todd Smith.  
9 Q Anyone else?  
10 A No.  
11 Q Are you participating in any of the decisions by BP as  
12 to whether or not you're going to implement the state  
13 of the art SCADA system?  
14 A No.  
15 Q Who's involved in those decisions; do you know?  
16 A I believe Todd Smith and Greg Russell.  
17 Q Who is Greg Russell?  
18 A BP's IT.  
19 Q Their IT person?  
20 A Pardon?  
21 Q BP's IT person?  
22 A Yes.  
23 Q Let's go back to where we were. On June 10th, 1999,  
24 you had inputted some historical data into the SCADA  
25 system, correct?

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1 A Correct.

2 Q Historical data means what?

3 A Actually, that's not correct.

4 Q Correct it if you want. We've got that from you

5 earlier so go ahead and correct it if you want to

6 correct your answer.

7 A I created historical containers, a location within the

8 database for the historical information to be stored.

9 Q So you actually didn't add a historical record?

10 A I did.

11 Q You made the container and you put some things in the

12 container for the historical data?

13 A The putting happens internally.

14 Q So you created a historical container under the SCADA

15 system that then updates itself automatically?

16 A Correct.

17 Q And so was the creation of the historical container

18 something that you have done before?

19 A Yes.

20 Q And was it something that you did right or wrong this

21 time that caused some errors to be produced?

22 A Not that I'm aware of.

23 Q Did the errors occur shortly after you created the

24 historical container?

25 A Yes.

1 Q What is the template called?

2 A The template exists in a utility software piece of the

3 Vector SCADA software. It is called "Historic

4 Record".

5 Q And you just fill in the template and that gives

6 additional capacity on the SCADA system for it to

7 self-automate and fill in the historical data?

8 A That's not -- I don't understand.

9 Q When you go through the template for the historical

10 record, what are you doing then, creating the

11 container for the machine to self-automate and fill in

12 with the historical data?

13 A Correct.

14 Q And once you fill out the template, this occurs

15 automatically?

16 A Correct.

17 Q And how long does it keep going until the container is

18 full?

19 A The container never fills.

20 Q Why have you had to do this before?

21 A There are -- there are times in the life of the SCADA

22 system where we need to archive data. It's a way to

23 archive data and recall them from these containers.

24 It's a tool.

25 Q Are you doing it by years or by time or by subject or

1 Q Did you ever come to an understanding as to what cause

2 and effect your creation of the historical containers

3 may have had on the SCADA system and the errors that

4 were produced?

5 A No.

6 Q How quickly after you created the container on the

7 SCADA system for the historical data did the errors

8 start coming?

9 A Approximately ten to 15 minutes.

10 Q What sort of errors are we looking at?

11 A Historical processing errors. It appeared to be

12 related to the work that I had done.

13 Q Why do you say that?

14 A Because in the error coding, in the error log when you

15 invoke ESEA, it tells you which historical, which

16 process is generating, doesn't like the work that had

17 been accomplished.

18 Q Does it tell you what about the work that was

19 accomplished it doesn't like?

20 A It does not. It just tells you which of the processes

21 is unhealthy or is acting up.

22 Q How were you trained on creating these historical

23 containers?

24 A Just by doing it. It's pretty straightforward. It's

25 a fill-in-the-blanks template.

1 what?

2 A By time. It's realtime data that is stored there.

3 Q So you're creating a container serving as an archiving

4 system based upon time?

5 A Yes.

6 Q So how often are you creating these containers then?

7 A Not very often. You know, off and on as the need

8 arises.

9 Q How does the need arise if it never fills up?

10 A You lost me.

11 Q Where does the need come from?

12 A Any telemetered value coming in SCADA can be

13 historized --

14 Q Is that a word?

15 A -- and contained. Well, I think so.

16 Q I'm teasing you. I have a tendency to do that as

17 well.

18 A I think so. Can be historically archived, so --

19 Q I'm trying to find out where the need came from

20 though. If we're just doing this on a time continuum

21 that never fills up, where does the need come in so

22 that we need to set up a different archiving or

23 segregate the archiving?

24 A When I say need, I don't mean point specific.

25 Q What do you mean by need then?

1 A With any point being able to be historically archived,  
2 if we deem it necessary we create a new record for  
3 that point, and there are thousands of points coming  
4 into the SCADA system.  
5 Q Why on June 10th did you deem it necessary to create a  
6 new archive?  
7 A We wanted to monitor the vibration or have a  
8 historical record of the vibration levels of those, of  
9 the pump units at Olympia junction.  
10 Q Why?  
11 A Vibration levels were, in those pump units were less  
12 than perfect and we would use the data to troubleshoot  
13 and analyze for repair purposes.  
14 Q Which pump units were you looking at, all or any in  
15 particular?  
16 A The two. I created records for the two pump units at  
17 Olympia junction.  
18 Q Olympia, okay.  
19 A Yes.  
20 Q Is the SCADA system used as a safety tool?  
21 A You bet.  
22 MR. ALLEN: Object to the form of the  
23 question.  
24 Q In what way?  
25 A It allows us to monitor -- it is one of the safety

(LLOYD TIEKEN - BY MR. BENINGER)

1 Q And I understand that you've been given some immunity  
2 to be able to testify, correct?  
3 A Yes.  
4 Q Who else with the company that you're aware of has  
5 been given immunity?  
6 MR. MARTIN: Objection. Foundation.  
7 MR. ALLEN: Join the objection.  
8 A I don't know.  
9 Q Anybody else?  
10 MR. WOLFE: He just answered that he doesn't  
11 know.  
12 Q Anybody else?  
13 A I don't know.  
14 Q You haven't talked to anybody about whether they're  
15 going to testify or not testify before the Grand Jury?  
16 A Yes.  
17 Q And who would those people be you've talk with about  
18 this?  
19 A Ron Burt.  
20 Q Who else?  
21 A Holly Williamson.  
22 Q Who else?  
23 A That's all I can recall.  
24 Q Have you talked with any other people as to whether  
25 they were going to be taking the Fifth Amendment in

1 tools. It allows us to monitor the system remotely  
2 and operate the system, the pipeline system.  
3 Q Now, back on June 10th, 1999 --  
4 MR. WOLFE: David, could we take a break?  
5 MR. BENINGER: Sure.  
6 MR. DAHL: Going off the record. The time  
7 is approximately 10:31 a.m.  
8 (Recess taken at 10:31 a.m.)  
9 MR. DAHL: Back on the record. The time is  
10 approximately 10:44 a.m.  
11 BY MR. BENINGER:  
12 Q I forget exactly where I was when we left off, but let  
13 me do a couple other things. You know I'm here on  
14 behalf of the families that lost two of the little  
15 boys in the explosion, correct?  
16 A Yes.  
17 Q And this is going to be typed up and put into what we  
18 call a deposition. It will be transcribed and typed  
19 up for you to read and for them to read as well. You  
20 know that?  
21 A Yes.  
22 Q And I may also give it to other experts and other  
23 people for them to read as well. Do you understand  
24 that?  
25 A Yes.

(LLOYD TIEKEN - BY MR. BENINGER)

1 answer to questions either by myself or in response to  
2 the U.S. Attorney's Office or anyone else?  
3 A No.  
4 Q Let's go back to where we were, and that is on June  
5 10th, when you created the historical data container,  
6 was that at approximately 2:50 in the afternoon?  
7 A Yes.  
8 Q And I say that because I'm looking at Exhibit 221 at  
9 the top there. Is that what you did, plus or minus  
10 1450?  
11 A Yes.  
12 Q That was the time you were inputting the data or is  
13 that the time that you were creating this document?  
14 A That was the time the process started.  
15 Q And then you tried to set out in Exhibit 221 the  
16 various things that you did in putting through the  
17 process, putting in the historical data and then  
18 checking the system and getting the errors response  
19 back, correct?  
20 MR. ALLEN: Object to the form of the  
21 question.  
22 A Yes.  
23 Q As you walked on through, and I'm looking at this  
24 here, when you're talking primary machine and  
25 secondary machine, what are you talking about there?

1 A Two mainframe computers, one in primary role, one in  
 2 secondary role as back-up.  
 3 Q And the primary one, is that the SCADA system that is  
 4 primarily used and operated?  
 5 A No.  
 6 Q Which one is primarily used and operated, the primary  
 7 or the secondary SCADA?  
 8 MR. ALLEN: Object to the form of the  
 9 question. It's confusing.  
 10 Q You have one SCADA system that's operated on two  
 11 mainframe computers, correct?  
 12 A Yes.  
 13 Q And the one mainframe computer is a primary mainframe  
 14 computer?  
 15 A Yes.  
 16 Q And then you have a second mainframe that's a  
 17 secondary mainframe?  
 18 A Yes.  
 19 Q Do you normally operate off of the primary mainframe  
 20 computer?  
 21 A Always.  
 22 Q When do you use the secondary mainframe computer?  
 23 A In the event of a failover.  
 24 Q And can that be -- the failover request, that be done  
 25 both automatically with the system as well as

1 A No.  
 2 Q Everything is identical?  
 3 A As a nonexpert, yes.  
 4 Q All of the information, all the screens, everything  
 5 else would be the same between the secondary and the  
 6 primary mainframes?  
 7 A Yes.  
 8 Q Had you ever run the -- you lost your coat there. I  
 9 don't know if you need that or not.  
 10 A I do, thank you.  
 11 Q Had you ever used the back-up or the secondary  
 12 mainframe computer to run the SCADA system before  
 13 this?  
 14 A Yes.  
 15 Q On how many occasions?  
 16 A Weekly.  
 17 Q And for what reason?  
 18 A That was the routine.  
 19 Q What was the routine?  
 20 A To perform a failover on Mondays from one machine to  
 21 the other so they took turns in role of  
 22 primary/secondary.  
 23 Q So the two mainframes, is there one that's actually  
 24 deemed the primary and one that's deemed the secondary  
 25 or is the one that's operating deemed the primary?

1 manually?  
 2 A Yes.  
 3 Q On June 10th, 1999, did you do a failover manually?  
 4 A Yes.  
 5 Q Why?  
 6 A The machine bogged down, the primary machine bogged  
 7 down and became unresponsive.  
 8 Q By unresponsive, do you mean it locked up and was not  
 9 providing any response at all or was it slowly  
 10 responsive?  
 11 A Locked up.  
 12 Q When it locks up, is there a system so that  
 13 automatically the failover kicks in and the secondary  
 14 mainframe comes on line?  
 15 A No.  
 16 Q So even with a lockup, that must be done manually, the  
 17 switchover between the primary to the secondary  
 18 mainframe?  
 19 A Yes.  
 20 Q What is the time delay in doing the switchover or the  
 21 failover as you call it?  
 22 A Approximately 30 seconds.  
 23 Q Is there a difference at all in the systems or the  
 24 processing times between the primary mainframe and the  
 25 secondary mainframe?

1 A Yes.  
 2 Q As to the latter question or the first question?  
 3 A The latter.  
 4 Q So these systems then every other week, of the two  
 5 mainframe computers, every other week they switch from  
 6 being primary to secondary; is that correct?  
 7 A Yes.  
 8 Q On June 10th, the switchover or the failover, that was  
 9 a nonscheduled switchover from the primary to the  
 10 back-up, correct?  
 11 A Yes.  
 12 Q How long did you anticipate leaving it in that mode?  
 13 A Leaving it? I don't understand.  
 14 Q Leaving the SCADA system being run off of what was at  
 15 that point in time the secondary mainframe.  
 16 A No longer than I had to.  
 17 Q Your plan was then to switch it back to what at that  
 18 point had been the primary system?  
 19 A I, I don't -- I don't know.  
 20 Q Do these two mainframes, do they have any permanent  
 21 designation that we would be able to separate the two  
 22 out?  
 23 A As OLY01 and OLY02.  
 24 Q OLY0?  
 25 A Yeah.

1 Q Which stands for what?  
 2 A Olympic machine 01, Olympic machine 02 for 1 and 2.  
 3 Q And the primary that you had operating before the  
 4 failover, that was OLY01 or OLY02?  
 5 A 2.  
 6 Q And you switched that over to OLY01; is that correct?  
 7 A Yes.  
 8 Q And when you went to OLY02, did that not have the same  
 9 problems with the historical container?  
 10 MR. ALLEN: Object to the form of the  
 11 question.  
 12 Q I'm sorry, when you switched to OLY01, did that not  
 13 have the same problems with the historical container?  
 14 A I don't know.  
 15 Q The software changes that you made, would that be  
 16 applicable to both OLY01 and OLY02?  
 17 A Yes.  
 18 Q Do you know why, if you simply switched over the  
 19 mainframe computers, it might have solved your error  
 20 problem?  
 21 A No.  
 22 Q Why did you do the switchover?  
 23 A We needed control. We needed to be able to monitor  
 24 and operate our systems.  
 25 Q At that point in time though when you did the

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(LLOYD TIEKEN - BY MR. BENINGER)

1 to cause a problem to both mainframes?  
 2 A I don't understand. Would you rephrase that, please?  
 3 Q Sure. If you're thinking in your mind I might have  
 4 caused a problem to the software and that problem may  
 5 infect both OLY01 and OLY02, so if I just switch over  
 6 I may have the same problem. It may lock up. Now  
 7 I've got both computers down. Before you did that did  
 8 you try to notify somebody and say, hey, I may have a  
 9 problem here?  
 10 A Okay, could you be more specific? That sounded like  
 11 two questions in one to me.  
 12 Q It might have been. Give it the best shot that you  
 13 could and I'll try to break it down.  
 14 MR. MARTIN: Object.  
 15 MR. ALLEN: Objection, instruct the witness  
 16 not to answer.  
 17 MR. BENINGER: There's going to be no  
 18 instructions not to answer, no instructions not to  
 19 answer unless you want to go and deal with that.  
 20 MR. ALLEN: You can go deal with it.  
 21 MR. BENINGER: That's fine. You're entitled  
 22 to make an objection and that's it.  
 23 MR. ALLEN: You asked a confusing question.  
 24 MR. BENINGER: That's fine. That's the  
 25 objection.

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1 switchover, you thought that it may have been related  
 2 to the software changes you made to the historical  
 3 container?  
 4 A I did not know what the problem was.  
 5 Q That's what the error message was telling you though,  
 6 wasn't it?  
 7 A Not specifically, no.  
 8 Q The error message was related to the historical data  
 9 though, correct?  
 10 A To historical data. I can't tell you which data  
 11 specifically.  
 12 Q Did you actually, when you made the switchover, were  
 13 you actually thinking in your mind, I wonder if  
 14 there's something that I did that caused this problem  
 15 when I did the historical container?  
 16 A Yes.  
 17 Q And so were you also thinking, well, if I did this, if  
 18 I caused this problem by doing the historical  
 19 container software change, that's going to affect both  
 20 the OLY01 as well as OLY02?  
 21 A Yes.  
 22 Q So what were you doing then before you made the  
 23 switchover to have some sort of tertiary back-up in  
 24 place for this, if, in fact, it did turn out that you  
 25 had caused a problem with the software that was going

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(LLOYD TIEKEN - BY MR. BENINGER)

1 Q Go ahead.  
 2 A Would you rephrase the question, please?  
 3 Q What did you do to try to preempt any problems that  
 4 may have come from the two computer systems that may  
 5 be going down because of your software change?  
 6 A I deleted the two records that I created.  
 7 Q That was before or after OLY02 locked up?  
 8 A That was after.  
 9 Q And was OLY01 on line at that point?  
 10 A Yes.  
 11 Q What time did you make the switchover between OLY02 to  
 12 OLY01?  
 13 A Approximately 1535.  
 14 Q Now, when you made the switchover, were you aware of  
 15 any other alarms going off notifying you of any other  
 16 problems in the system besides this error message?  
 17 A Yes.  
 18 Q What other alarms or warning signals were you getting?  
 19 A Ron Burt had come into the computer room and told me  
 20 that the computer was unresponsive or the SCADA system  
 21 was unresponsive.  
 22 Q How far in advance of the switchover did Mr. Burt tell  
 23 you this?  
 24 A Approximately five minutes.  
 25 Q Was it because of his report to you that the computer

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1 system was unresponsive that you did the switchover or  
 2 was it because it actually locked up?  
 3 A Both, but, yeah, primarily because it locked up.  
 4 Q Did it lock up when you were using it or was that a  
 5 report that you got that the system had locked up?  
 6 A Virtually simultaneous. I recognized the  
 7 unresponsiveness of O2 at almost the same time Ron  
 8 stuck his head in and said, hey, the SCADA is  
 9 unresponsive.  
 10 Q Were you aware of any of the other operations that  
 11 were going on at that point in time from the control  
 12 room?  
 13 A No. Yes.  
 14 Q What were you aware of?  
 15 A When Ron Burt put his head in the door and told me  
 16 that the SCADA was unresponsive, he also told me that  
 17 Kevin had just swung the line from Renton to Seattle  
 18 so we would like to get control as, you know, fix it  
 19 ASAP.  
 20 Q Did they indicate there was any problem when they  
 21 swung the line from Renton to Seattle?  
 22 A No.  
 23 Q What do you mean by "swung the line from Renton to  
 24 Seattle"?  
 25 A The stream is routed from one delivery facility to

1 A I'd focused on -- okay. Initially paged my supervisor  
 2 to let him know that we had an upset condition in  
 3 SCADA.  
 4 Q Who was that?  
 5 A Ron Brentson.  
 6 Q Where was Mr. Brentson?  
 7 A I don't know.  
 8 Q How did you page him?  
 9 A A voice intercom in-house.  
 10 Q So that would be in-house, meaning at the Control  
 11 Center?  
 12 A In Renton building or buildings.  
 13 Q And did he call you back?  
 14 A Did not.  
 15 Q What did you do then?  
 16 A I focused on getting one of the mainframe computers up  
 17 and functional.  
 18 Q And this would have been between the 3:30 and 3:35  
 19 time period?  
 20 A Initially.  
 21 Q What do you mean initially?  
 22 A Well, the duration of that process took approximately  
 23 25 minutes.  
 24 Q To switch over from OLY02 to OLY01?  
 25 A Actually, no. The switch would have taken, yeah,

1 another.  
 2 Q And you're switching that over or are you swinging  
 3 that over or what are you doing?  
 4 A Opening one series of valves and closing another  
 5 series of valves.  
 6 Q Is that done from the Control Center?  
 7 A Correct.  
 8 Q And at the point in time you were told that the system  
 9 was unresponsive, did that have anything to do with  
 10 the valves being unresponsive?  
 11 A Repeat, please.  
 12 Q Sure. The operation that was being done was a  
 13 switchover which would involve opening and closing  
 14 certain valves, correct?  
 15 A Correct.  
 16 Q And when you had it reported to you that the system  
 17 was unresponsive, were you understanding that to mean  
 18 that the valves were not opening or closing as they  
 19 were supposed to?  
 20 A I understood this switching over to have been  
 21 complete.  
 22 Q Before it became unresponsive?  
 23 A That was my assumption.  
 24 Q What happened after that point when Ron Burt comes in  
 25 and tells you that the system is unresponsive?

1 would have been pretty much immediate by 3:35 had 1  
 2 functioned properly.  
 3 Q But by process, what are you talking about, process?  
 4 A It's a -- by process. Can you be more specific?  
 5 Q You said the duration of the process took 20 to 25  
 6 minutes.  
 7 A The process of stopping and starting, restarting and  
 8 stopping, the roles of the two mainframe machines.  
 9 Q And that process would have started about 3:30,  
 10 between 3:30 and 3:35, correct?  
 11 A Correct.  
 12 Q When you say upset condition, is that a term of art?  
 13 A It's a term.  
 14 Q Does it also mean an abnormal condition?  
 15 A Yes.  
 16 Q And I use the term abnormal as abnormal as you were  
 17 trained in your manuals and as the Operator Manual for  
 18 Controllers sets forth "abnormal condition", correct?  
 19 A I'm not -- I can't -- I don't know if it applies one  
 20 to one to the manual.  
 21 Q Do you know if like the OLY02 goes down, locks up and  
 22 goes down, is that an abnormal condition requiring you  
 23 to do certain things in accordance with the operator  
 24 manual?  
 25 A It is my understanding that -- I don't recall a

1 computer specific piece in the Operations Maintenance  
2 Procedures Manual addressing this particular problem  
3 at this point in time.

4 Q As of June last year, did you have specific training  
5 which let's you know that a computer specific problem  
6 like the primary computer locking up and going down  
7 required certain steps to be taken?

8 A Just -- no.

9 Q So it would be safe to say that you didn't take any  
10 specific steps when OLY02, the primary computer,  
11 locked up in order to deal with an abnormal situation  
12 or an emergency situation?

13 A The normal steps are to get it back on line.

14 Q That's it?

15 A Yeah.

16 Q I just wanted to make sure you didn't initiate any  
17 other procedures you might have been trained on  
18 dealing with a computer malfunction or a computer  
19 upset condition. You didn't institute any shutdown  
20 procedures or institute any other sort of protocol  
21 other than just simply trying to get the back-up on  
22 line; is that correct?

23 A That is correct.

24 Q From your position in the SCADA room, can I call it a  
25 SCADA room?

(LLOYD TIEKEN - BY MR. BENINGER)

1 clear earlier. In the computer room, do they also  
2 have, if there's a problem with the line itself, do  
3 they also get those alerts or those warnings or those  
4 alarms in the computer room?

5 A They can.

6 Q But they don't always?

7 A They don't always, no.

8 Q Which ones go to the computer room as well as to the  
9 control room and which ones don't?

10 MR. ALLEN: Object to the form of the  
11 question. It's vague.

12 A More specifically?

13 Q That's what I'm trying to find out from you, more  
14 specific. Which alarms are in both the computer room  
15 and the control room and which ones aren't?

16 A I guess they can and they can't. If -- it depends on  
17 the display. You can display any screen you want in  
18 the computer room, and if the alarm summary screen was  
19 displayed, if it had been displayed, then I may have,  
20 had I had the chance to look at that screen and pay  
21 attention to the pipeline with, you know, over and  
22 above my being focused on the computers, you know, the  
23 opportunity could exist but didn't at that time.

24 Q Is the only way that an operator in the control room  
25 is alerted that there's an alarm is if they have the

1 A Sure.

2 Q How would you call it?

3 A Computer room.

4 Q The computer room. From your position in the computer  
5 room, do you have access to any of the other lights or  
6 warnings or anything else on the SCADA system itself  
7 telling you how the integrity or function of the line  
8 is?

9 A Yes.

10 Q And were you getting any alerts after Ron Burt came  
11 in -- let me do it this way: Before Ron Burt came in  
12 to tell you that the computer was unresponsive, were  
13 you getting any warnings or alerts from any problems  
14 or safety concerns on the line itself?

15 A No.

16 Q After Ron Burt came in to tell you that the computer  
17 was unresponsive, did you get any alerts that there  
18 was a problem of safety or the integrity of the line?

19 A No.

20 Q Never?

21 A No.

22 Q Why not?

23 A I wasn't running the pipeline. I was trying to get  
24 the computers functional.

25 Q But were any alerts -- I guess maybe I didn't make it

(LLOYD TIEKEN - BY MR. BENINGER)

1 alarm summary screen on?

2 A Um, no.

3 Q I mean the system is set up so that the alarm sounds  
4 so that people can then be alerted to go find out what  
5 the problem is, correct?

6 A It is.

7 Q I'm looking now in the computer room though as to  
8 what's in the computer room to give the general alarms  
9 to let you know to either go to the alarm summary  
10 screen or go to some other screen to find out what the  
11 problem is. Does that exist in the computer room?

12 A Yes, it exists from an R&D perspective. When I'm in  
13 the computer room I'm not running the pipelines. I'm  
14 not paying attention to the alarms. My role in there  
15 is to work with SCADA.

16 Q Now, did the alarms not go on in the computer room or  
17 did they go on and you just didn't pay attention to  
18 them?

19 A I don't know.

20 Q You don't recall an alarm?

21 A I can't tell you which display was displayed that day.

22 Q Gets back to what I said earlier. Is there a general  
23 alarm that goes to the computer room that,  
24 irrespective of what's being displayed, let's you  
25 know --

1 A No.

2 Q How does that work in the control room so you don't

3 have the alarm summary on?

4 MR. ALLEN: Object to the form of the

5 question. Vague, incomplete.

6 A Could you be more specific?

7 Q Okay. Actually, when you met with counsel, did he

8 kind of key in on some code words that if he says

9 vague or specific, that you need to ask for more?

10 A No.

11 Q How does the -- let me do this: In fact, I'm going to

12 do some hierarchy here. Why don't you tell me how the

13 hierarchy works in the control room. What's the

14 hierarchy in the control room?

15 A As it pertains to?

16 Q Personnel.

17 A Even, shared response or shared, you know, status.

18 With one exception, the controller with a 2 title, as

19 Kevin had, has more time and grade. However, we view

20 one another as equals and work side by side.

21 Q How many people are normally in the control room?

22 A Two.

23 Q On this day there were three. Why?

24 MR. FINEGOLD: Object. That's not what he

25 said.

1 A Correct.

2 Q And what is segment 1? What is that person? What are

3 they responsible for?

4 A At that point in time the alignment was generally 16,

5 the 16 inch from Allen to Renton and delivered just

6 strictly to Renton, Sea-Tac and Seattle, DF, Harbor

7 Island.

8 Q And that would be segment 1, correct?

9 A Segment 1.

10 Q Who was on June 10th, after 3:00, who was on mainline

11 and who was on segment 1?

12 A Ron Burt was mainline. Kevin Dyvig was segment 1.

13 Q And as I understand it, within the control room

14 itself, the controllers, they're called controllers,

15 correct?

16 A Correct.

17 Q And the controllers have equal authority and equal

18 responsibility, correct?

19 A Yes.

20 Q How many people are in the control room now?

21 A Eight.

22 Q Eight people?

23 A Officially. You mean -- okay, would you re --

24 Q At any one time?

25 A At any one time? Two.

1 MR. ALLEN: Misstates former testimony.

2 Join the objection.

3 Q Maybe I missed something. You said in the Control

4 Center were three people, Kevin Dyvig, Dave Smith and

5 Ron Burt?

6 A Throughout the day that is true, but at any given

7 point in time there were only two.

8 Q How did that work then?

9 A Dave Smith worked mainline in the morning and Ron Burt

10 relieved him at 3:00 p.m.

11 Q So normally there's two people in the control room?

12 A Yes.

13 Q And how are the duties divided up between those two

14 people?

15 A One's on mainline, one's on segment 1, and typically

16 the mainline is a much more difficult system.

17 Q What does the mainline do?

18 A It, okay, 20, it is generally an alignment of two of

19 the four refineries to Allen Station, to Renton via

20 the 20 inch and then boosted from Renton to Portland

21 via the 14 inch. That constitutes our label

22 "mainline".

23 Q And is the person that's monitoring the mainline, that

24 would be one person who would be monitoring the 20

25 inch up north of Renton and the 14 inch down south?

1 Q So the number there at any one time is the same,

2 correct?

3 A Not always.

4 Q What situations would they not be?

5 A Training situations. There would be three.

6 Q That was just like before though, too, wasn't it?

7 Training situations there would be three?

8 A Correct.

9 Q Are there any situations though now that you have

10 different numbers of people in there than you would

11 have had before?

12 MR. ALLEN: Speaking of before June 10th?

13 Q Before June 10th.

14 A Would you repeat that, please?

15 Q Sure. Are there any situations where there's

16 different numbers of people in the control room now,

17 where those same situations before June 10th it would

18 be different?

19 A No.

20 Q You said eight. Do you mean there's eight controllers

21 total?

22 A Yes.

23 Q How many controllers total were there before June

24 10th?

25 A 10, I believe.



- 1 Q Why are there two less now?
- 2 A Todd has taken a position out of the Control Center, a  
3 system engineer, and Dave Smith is on his way out as a  
4 measurement person.
- 5 Q Who was fired?
- 6 MR. ALLEN: Object to the form of the  
7 question. No foundation.
- 8 A Fired?
- 9 Q Yeah. I mean we all read in the paper --
- 10 A Who was not offered a position?
- 11 Q There was a big press conference that BP had about  
12 firing workers. You heard about that, didn't you?
- 13 A Yes.
- 14 Q Who were those people who were fired?
- 15 A Mark Kruger.
- 16 Q Who else?
- 17 A Kadel Rayburn.
- 18 Q Kay?
- 19 A Kadel.
- 20 Q Rayburn?
- 21 A Frank Jasso and Todd Gean.
- 22 Q Gean?
- 23 A Gean.
- 24 Q And were these controllers before?
- 25 A No.

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(LLOYD TIEKEN - BY MR. BENINGER)

- 1 A Yes.
- 2 Q Who was taking their place?
- 3 A Ricky Rawson has replaced Ron Brentson, and Kevin is  
4 not replaced yet. He's still dispatching.
- 5 Q He's still dispatching?
- 6 A Yes.
- 7 Q He's still in the same position he was before?
- 8 A Yes.
- 9 Q Still doing the same job he was before?
- 10 A Yes.
- 11 Q You understand that he wants to take the Fifth  
12 Amendment in response to questions? Did you know  
13 that?
- 14 A I don't know that.
- 15 Q You do know that BP at their big press conference led  
16 people to believe that they had actually reassigned  
17 Kevin Dyvig, taken him off his job? Did you  
18 understand that?
- 19 MR. ALLEN: Object to the form of the  
20 question. No foundation.
- 21 A I don't.
- 22 Q You don't know that. Have you heard of any plans for  
23 him to be actually taken off his position?
- 24 A Yes.
- 25 Q When is that?

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- 1 Q Where were these people?
- 2 A Field operators.
- 3 Q So the big hoopla that BP made, were there any people  
4 in the control room that were actually fired? Any  
5 controllers that were actually fired?
- 6 MR. ALLEN: Objection to the form of the  
7 question.
- 8 MR. FINEGOLD: Objection to the form of the  
9 question.
- 10 A No.
- 11 Q Okay. Were there any new controllers that were  
12 brought in?
- 13 A No.
- 14 Q There were some controllers and supervisors that I  
15 understand were reassigned, Dyvig and Brentson?
- 16 A Yes.
- 17 Q What were you told as to the reason for the  
18 reassignment?
- 19 A Nothing.
- 20 Q Didn't have to do with safety concerns?
- 21 A Nothing.
- 22 Q Did it have to do with public relations?
- 23 A Nothing.
- 24 Q They just let you know that these people were being  
25 reassigned and that was it?

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(LLOYD TIEKEN - BY MR. BENINGER)

- 1 A I don't know.
- 2 Q This Ricky Rawson, was that some -- is that a male or  
3 female?
- 4 A A male.
- 5 Q Is that someone who was with the company before?
- 6 A No.
- 7 Q They were brought in by BP?
- 8 A Can we back up?
- 9 Q Sure.
- 10 A Which company?
- 11 Q Olympic Pipe Line.
- 12 A Okay. No.
- 13 Q Were they with Equilon before?
- 14 A No.
- 15 Q Were they with Texaco or Shell or Arco?
- 16 MR. FINEGOLD: Object to the form of the  
17 question. Who is they?
- 18 Q Go ahead.
- 19 A Who is they?
- 20 Q Who do you think I'm talking about? Lawyers like to  
21 make objections, but do you know who I'm talking  
22 about?
- 23 A I think Ricky Rawson.
- 24 Q All right.
- 25 A No.

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1 Q Who was Ricky Rawson with before?  
 2 A BP.  
 3 Q That you know of -- who are the controllers? Maybe  
 4 I'll get that list. Who are the controllers, the ten  
 5 people in June, 1999?  
 6 A Myself, Ron Burt, Chris Herrera, Kevin Dyvig, Dave  
 7 Clements, Mike Ransom, John Smith, Dave Smith, Todd  
 8 Smith. I think that's all of them.  
 9 Q I got nine of them. I'll read it back to you. Lloyd  
 10 Tieken, Ron Burt, Chris Herrera, Kevin Dyvig, Dave  
 11 Clements, Ransom, John Smith, Dave Smith, Todd Smith.  
 12 A That's correct.  
 13 Q Nine of them? Were there any other ones that you  
 14 could think of?  
 15 A That sounds like all of them.  
 16 Q The Smiths, are they related?  
 17 A Todd and Dave are brothers.  
 18 Q Of these nine controllers who were there June 10th, or  
 19 employed, I should say, June 10th, 1999, have any of  
 20 them been relieved of duty?  
 21 A Yes.  
 22 Q Which ones?  
 23 A Chris Herrera.  
 24 Q And why was Chris Herrera relieved?  
 25 A I believe he was -- actually, I don't know.

1 terminated or anything?  
 2 MR. ALLEN: Object to the form of the  
 3 question.  
 4 A No.  
 5 Q Is it basically business as usual out there?  
 6 MR. MARTIN: Object to the form of the  
 7 question.  
 8 A It will never be business as usual.  
 9 Q Same people doing the same things that they did in  
 10 June, 1999, same positions, same operations, as  
 11 they're currently employed and doing now; is that  
 12 right?  
 13 A Yes.  
 14 Q Has there been training that has been done for all  
 15 these nine people?  
 16 A Yes.  
 17 Q And tell me about the training that has been done.  
 18 A Frank Hopf did a hydraulic seminar on basic pipeline  
 19 hydraulics.  
 20 Q When was that?  
 21 A For a period of one day plus. Late 19 -- excuse me,  
 22 after the incident. I can't tell you specifically.  
 23 Q Before he left?  
 24 A Before he left.  
 25 Q Did you ever understand why he left?

1 Q When was Chris Herrera relieved?  
 2 A I don't know.  
 3 Q Before or after BP took over management?  
 4 A Before.  
 5 Q Other than Chris Herrera, anyone else relieved of  
 6 duties of these controllers that you've listed?  
 7 A No.  
 8 Q Have each of the controllers that you've listed been  
 9 offered employment with BP?  
 10 A Yes.  
 11 Q Any of them that you're aware of that has not been  
 12 offered employment with BP?  
 13 A No.  
 14 Q One of the articles talked about, of the BP, the big  
 15 press conference they had, talked about serious  
 16 concerns of the controllers on duty at the time. Do  
 17 you remember that?  
 18 A I really don't read the paper.  
 19 Q But you were made aware though of the fact that there  
 20 were some concerns of BP that were expressed at the  
 21 press conference of the controllers at the time?  
 22 A Vaguely.  
 23 Q Do you know, have any of the controllers at the time  
 24 that these serious concerns were expressed about, have  
 25 they been put on administrative leave or fired or

1 A Not -- no.  
 2 Q He had been there for a long time, hadn't he?  
 3 A Yes.  
 4 Q He was there before you came on in, what, '94?  
 5 A Yes.  
 6 Q And he'd been there for a number of years before you  
 7 came on in '94, correct?  
 8 A Yes.  
 9 Q And after this incident he leaves and you're not told  
 10 why he leaves?  
 11 A No.  
 12 Q Were you aware that he was taking the Fifth Amendment  
 13 in response to questions?  
 14 A Yes.  
 15 MR. WOLFE: Object. No foundation.  
 16 Q Did that concern you that the person who's in charge  
 17 of this whole facility is taking the Fifth Amendment?  
 18 MR. WOLFE: Object. Misstates the evidence.  
 19 MR. ALLEN: Object.  
 20 Q Go ahead.  
 21 A No.  
 22 Q Were you given any explanation as to why this Frank  
 23 Hopf, general manager, was going to take the Fifth  
 24 Amendment instead of answering questions as to what  
 25 occurred?

1 A No.  
 2 Q How did you hear that he was going to be taking the  
 3 Fifth Amendment?  
 4 MR. WOLFE: Excuse me. Could we get a time  
 5 frame?  
 6 Q Go ahead.  
 7 MR. WOLFE: Object to the form of the  
 8 question. No time frame, and it's a critical issue in  
 9 that Mr. Hopf, in that the timing of the alleged  
 10 invocation or purported future invocation of the  
 11 privilege occurred after Mr. Hopf left the employment  
 12 of the Olympic Pipe Line Company.  
 13 MR. ALLEN: Objection.  
 14 Q Go ahead.  
 15 A Would you repeat the question?  
 16 Q Sure. How did you hear that he was going to be taking  
 17 the Fifth?  
 18 A I don't recall.  
 19 Q You have the -- did you also know that the president  
 20 of the company, Crognale, that he was going to be  
 21 taking the Fifth as well?  
 22 A I did not.  
 23 Q How about Brentson? Brentson is still in his position  
 24 or has he been moved finally?  
 25 A Repeat --

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(LLOYD TIEKEN - BY MR. BENINGER)

1 Q That wasn't shared with you?  
 2 MR. ALLEN: Join the objection.  
 3 A No.  
 4 Q Did the company have any meetings with the employees  
 5 to talk about all the publicity and people taking the  
 6 Fifth Amendment and those kind of things?  
 7 MR. WOLFE: Object to the form of the  
 8 question.  
 9 Q Had there been a meeting that was going on on that?  
 10 MR. WOLFE: Excuse me. I want a conference  
 11 with counsel at this point  
 12 Q Had there been a meeting that was going on with that?  
 13 MR. ALLEN: Objection to the form of the  
 14 question. It's compound and misleading.  
 15 Q Go ahead.  
 16 A No.  
 17 Q No companywide meetings to discuss what happened and  
 18 what went on?  
 19 A No.  
 20 Q Was there any company investigation that you were part  
 21 of to try to determine what went on?  
 22 A More specifically?  
 23 Q Anything in general. Was there any investigation that  
 24 you're aware of that you participated in into why this  
 25 went on and what could be done to prevent it?

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1 MR. ALLEN: Object to the form of the  
 2 question. Compound.  
 3 Q Is Ron Brentson still in his position or has he  
 4 finally been moved to a new position?  
 5 A He has been -- he is effectively in the same position  
 6 with less, without the Control Center supervisor  
 7 piece.  
 8 Q And has Ricky Rawson taken over that?  
 9 A Yes.  
 10 Q And did you know that he was taking the Fifth  
 11 Amendment as well?  
 12 MR. FINEGOLD: Objection.  
 13 A No.  
 14 Q That hasn't been shared with you at all, that your  
 15 direct supervisor, the president of the company and  
 16 the vice-president of the company, those three people,  
 17 were all taking the Fifth Amendment?  
 18 MR. VERWOLF: Objection. There's no basis  
 19 for this.  
 20 MR. WOLFE: This is misleading to the  
 21 witness.  
 22 MR. MARTIN: Object as compound.  
 23 Q That wasn't shared with you?  
 24 MR. WOLFE: These are false representations  
 25 that are being made to the witness at this point.

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(LLOYD TIEKEN - BY MR. BENINGER)

1 MR. ALLEN: Object to the form of the  
 2 question.  
 3 A I don't understand "this".  
 4 Q Oh, the explosion and rupture and death of three kids.  
 5 You understand that, right?  
 6 A I do.  
 7 Q Any investigation that went on into why three people  
 8 died and what could be done to prevent a rupture and  
 9 occurrence like this again?  
 10 MR. MARTIN: Object to the form.  
 11 MR. ALLEN: Object to the form of the  
 12 question as compound. You asked two questions.  
 13 A I'm confused. Please, restate.  
 14 Q Sure. Any investigation that you're aware of as to  
 15 why three people died and what could be done to  
 16 prevent this in the future?  
 17 A No.  
 18 Q Did that seem odd to you that there was no internal  
 19 company investigation into this?  
 20 MR. ALLEN: Object to the form of the  
 21 question. No foundation.  
 22 A No.  
 23 Q Does the company usually investigate when there's been  
 24 a spill of less than 250,000 gallons?  
 25 A Yes.

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1 Q Does the company do an investigation when there's been  
 2 a spill of less than 10,000 gallons?  
 3 A Yes.  
 4 Q Does the company do an investigation when there's been  
 5 a spill of less than 5,000 gallons?  
 6 A Yes.  
 7 Q Then why wouldn't it seem unusual to you when we have  
 8 a spill of over 250,000 gallons that kills three  
 9 people?  
 10 MR. ALLEN: Object to the form of the  
 11 question.  
 12 A No one told me specifically that an investigation was  
 13 taking place. One may have been.  
 14 Q But isn't that unusual to you, given the magnitude of  
 15 the spill, as well as the fact that three people died,  
 16 compared to the fact that when they have minor spills  
 17 with no people dying, they do an investigation and  
 18 here they don't?  
 19 MR. ALLEN: Object to the form of the  
 20 question.  
 21 MR. VERWOLF: Argumentative, compound and no  
 22 foundation.  
 23 MR. ALLEN: Join all three of those bases  
 24 for objection.  
 25 Q Go ahead.

1 argumentative as well.  
 2 A Again, please?  
 3 Q See if we can read it back. Are you saying Olympic  
 4 Pipe Line investigates small scale leaks without  
 5 deaths but doesn't investigate large scale leaks with  
 6 deaths?  
 7 A I don't know.  
 8 Q Can you think of any reason -- has there been any  
 9 spill before of over 1,000 gallons that you can think  
 10 of that wasn't investigated by Olympic?  
 11 A I can't.  
 12 Q Can you think of any reason why Olympic wouldn't  
 13 investigate, do an internal investigation of this  
 14 spill given the magnitude of the release and the fact  
 15 that three people died?  
 16 A I can't.  
 17 Q Purpose of an investigation would be what?  
 18 A I believe it to be to establish why it happened and to  
 19 avoid any further problems.  
 20 Q Okay.  
 21 A A learning tool.  
 22 Q A learning tool. And do you think it's better for the  
 23 company to learn off of small mistakes with small  
 24 spills or big mistakes that kill people?  
 25 MR. VERWOLF: Object to that as

1 A Again, please?  
 2 Q Sure. Given your past history with this company,  
 3 knowing that they investigate spills that are less  
 4 than 5,000 gallons and spills that don't kill people  
 5 and spills that don't destroy a mile and a half of the  
 6 environment, didn't it seem unusual to you that there  
 7 wasn't a companywide investigation into this spill  
 8 that involved over 250,000 gallons and took three  
 9 lives?  
 10 A No.  
 11 Q Why not?  
 12 A It's different, a different type of release. You  
 13 know, I've never been involved in anything like this  
 14 so I didn't -- to be honest with you, I didn't know  
 15 what to expect.  
 16 Q What do you mean it's a different type of release?  
 17 A It's large scale is what I mean.  
 18 Q Are you say --  
 19 A With deaths.  
 20 Q Are you saying Olympic Pipe Line investigates small  
 21 scales without deaths but don't investigate large  
 22 scales with deaths?  
 23 MR. SPAAN: Object. You misstated his prior  
 24 testimony. He said he didn't know.  
 25 MR. ALLEN: Join that objection. It's

1 argumentative.  
 2 A I think that any learning is good.  
 3 Q On a weighting scale, would you think it would be more  
 4 important to figure out why this spill happened to  
 5 avoid any further problems or loss of life like this  
 6 again in the future, more so than a small spill that  
 7 didn't involve any loss of life?  
 8 A I -- would you repeat that, please? I'm getting  
 9 tired. Can I take a break?  
 10 Q Sure. Let's see -- let me get a quick answer to this  
 11 question that's pending and then we'll let you take a  
 12 break.  
 13 A And that was -- would you restate, please?  
 14 Q Sure. On a weight scale, would you think it would be  
 15 more important for Olympic to figure out why this  
 16 spill happened to avoid any further problems or loss  
 17 of life like this again in the future, more so than a  
 18 small spill that didn't involve any loss of life?  
 19 A Yes.  
 20 MR. BENINGER: And I promised you you could  
 21 take a break and we'll do it.  
 22 MR. DAHL: Going off the record. The time  
 23 is approximately 11:34 a.m.  
 24 (Recess taken at 11:34 a.m.)  
 25 MR. DAHL: Back on the record. The time is

1 approximately 11:43 a.m.  
 2 BY MR. BENINGER:  
 3 Q Now, Mr. Tiekens, it's been a little over a year since  
 4 this rupture and explosion occurred, correct?  
 5 A Yes.  
 6 Q What have you, as a controller for Olympic Pipe Line,  
 7 been told as to the cause of this occurrence?  
 8 A Nothing specifically.  
 9 Q So there's been no training that has been given to you  
 10 or education that has been given to you to serve as a  
 11 learning tool as to how to avoid any further problems  
 12 like this happening in the future?  
 13 A Yes, training, you know, basic, just refreshing, you  
 14 know, our knowledge base on hydraulics and such.  
 15 Q What about hydraulics played a role in this? What  
 16 about hydraulics played a role in causing this rupture  
 17 with the spill of 250,000 some gallons that took three  
 18 lives? What about hydraulics was so important in  
 19 that?  
 20 A Hydraulics in pipeline is important, period.  
 21 Q But I'm thinking, you said something about training so  
 22 I'm trying to figure out how, as a result of three  
 23 people dying in this rupture and release occurring,  
 24 why hydraulics was the thing that was focused on and  
 25 you were trained in?

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(LLOYD TIEKEN - BY MR. BENINGER)

1 as we have here in Washington State for Olympic Pipe  
 2 Line?  
 3 A It was a simulator. Conditions could be simulated  
 4 throughout the spectrum, but if it was exact replica,  
 5 no.  
 6 Q Did it have the same sort of leak detection systems on  
 7 the simulator as Olympic Pipe Line had in place?  
 8 A No.  
 9 Q Does it have the same sort of leak detection systems  
 10 on the simulator that Olympic Pipe Line has in place  
 11 now?  
 12 A No.  
 13 Q The simulator, was that something that was brand new  
 14 with Equilon?  
 15 A No.  
 16 Q Had you ever been given the opportunity to train on  
 17 this simulator before?  
 18 A No.  
 19 Q Had anyone else with Olympic Pipe Line that is in  
 20 charge or hired as a controller been given the  
 21 opportunity to go to Equilon and train on the  
 22 simulator before the June 10th, 1999, catastrophe?  
 23 MR. VERWOLF: Objection, no foundation.  
 24 A Yes.  
 25 Q Who?

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1 A Hydraulics is our job. I mean that's what pipeline is  
 2 all about.  
 3 Q What about the hydraulics that were going on on the  
 4 day of June 10th, 1999, that made this whole incident  
 5 a learning tool for you in learning about the  
 6 hydraulics and the training?  
 7 A Nothing specifically.  
 8 Q Other than hydraulics, have you had any other  
 9 training?  
 10 A Yes.  
 11 Q What other training have you had since June, since  
 12 June 10th, 1999?  
 13 A I trained on a leak detection model. They had a  
 14 simulator. Equilon owns a simulator in Houston and we  
 15 were put through a four hour or so course on  
 16 identification of leak detection, basically.  
 17 Q And was the leak detection simulator the same type of  
 18 leak detection system you had for Olympic Pipe Line?  
 19 A No.  
 20 Q What good was that going to do you from preventing  
 21 another leak like this from occurring?  
 22 A I think you're confused. It wasn't a leak detection  
 23 system. It was an ability to simulate a running  
 24 pipeline and simulate a leak.  
 25 Q And was that simulation on the same type of a pipeline

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(LLOYD TIEKEN - BY MR. BENINGER)

1 A I -- I don't know specifically.  
 2 Q Who do you think generally was allowed to go down and  
 3 train before the June 10th fire and deaths on the  
 4 simulator?  
 5 A I believe the bulk of the controllers went down. It's  
 6 my understanding the bulk of the controllers went down  
 7 prior to my hiring on with Olympic.  
 8 Q That would have been back in 1994?  
 9 A Prior to that, yes.  
 10 Q So this simulator for leak detection systems, the  
 11 purpose of that, I assume, is to give people, the  
 12 controllers, the opportunity to simulate a leak and  
 13 learn how to respond to that in an efficient and a  
 14 safe manner, correct?  
 15 A No.  
 16 Q What's the purpose of the leak detection simulator?  
 17 A To recognize the signature of a leak.  
 18 Q Simple recognition, that's it?  
 19 A Yes.  
 20 Q No response? Isn't the simulator to help you respond  
 21 to it?  
 22 A Some response, yes, yes.  
 23 Q Is the primary purpose of it simply to detect the  
 24 signature of a leak or then to figure out what to do  
 25 to respond to the leak? They've got to go hand in

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1 glove, don't they?

2 A They do, yes.

3 Q So the simulator really does both. It helps you to

4 detect the signature of a leak and then to respond to

5 it in an efficient and safe manner, correct?

6 A Yes.

7 Q Since you've been hired on in 1994, have any other

8 controllers been given the opportunity to go down to

9 refresh themselves on the simulator?

10 A Yes.

11 Q Who?

12 A All of us.

13 Q I'm talking, I'm sorry, before June 10th. Since

14 you've been hired and before June 10th, has anybody

15 else been given the opportunity to go down and train

16 on the simulator?

17 A No.

18 Q Do you know why?

19 A No.

20 Q Equilon did actually manage the pipeline, correct?

21 MR. VERWOLF: Objection, no foundation.

22 Calls for a legal conclusion.

23 A At -- yes.

24 Q How do you know that?

25 A It was announced when Equilon entity became a reality.

1 A All with the exception of Larry, John Smith and

2 myself.

3 Q Any other simulators that you've been given access to

4 like a SCADA simulator, operation simulator, any other

5 simulators that you were given access to to train

6 either before or after June 10th?

7 A No.

8 Q Now, the training then, you talked about a one day

9 training session on hydraulics, a seminar done by

10 Frank Hopf, correct?

11 A Yes.

12 Q And you talked about being able to use the leak

13 detection simulator. Where is that located?

14 A It's Two Shell Plaza in Houston.

15 Q When was that?

16 A After the incident. I don't -- I would say November

17 of '99 would be a ballpark.

18 Q And did all the controllers go down then?

19 A Yes.

20 Q Other than those two things, what other training have

21 you been given since June 10th?

22 A We have been given a test, a knowledge test, a basic

23 pipeline knowledge test which incorporates Bayview

24 facility.

25 Q Who gave this test?

1 Q And the simulator, was that at the Texaco facilities

2 or was that at the Shell facilities?

3 A Shell.

4 Q And you understand Shell and Texaco are the two

5 companies that merged to form Equilon, correct?

6 A Yes.

7 MR. VERWOLF: Objection, no foundation.

8 Q And so even before 1994 when they were still separate

9 entities, Shell made their simulator available for the

10 Olympic Pipe Line crews to come down and train on

11 their leak detection simulator, correct?

12 A I don't know.

13 MR. VERWOLF: Objection, no foundation.

14 Q How did you answer my question before that the bulk of

15 the controllers went down to the, now we know Shell

16 simulator and trained on them before you came on board

17 in 1994?

18 A My fellow controllers told me.

19 Q The -- what controllers would those have been that

20 were there before you? We had nine that were listed

21 down here. Which ones were there before you? You

22 probably can't read my writing very well.

23 A I just remembered the one I missed. Larry Shelton.

24 Q Of those ones, which ones were there before you were

25 hired on in '94?

1 A Frank Hopf.

2 Q This was before he left?

3 A Yes.

4 Q And was there additional training that went along in

5 preparation for the test?

6 A No.

7 Q Were the results posted?

8 A No.

9 Q Were the results made known to the people who took the

10 test?

11 A Individually.

12 Q How did you do on the test?

13 A I did well, a hundred percent.

14 Q How long was this test?

15 A This test was about, oh, half an hour at the most.

16 Q Okay. Other than a one day hydraulic seminar, access

17 to the leak detection simulator and a half hour test,

18 what other training have you had since this

19 catastrophe on June 10th?

20 A Well, effectively training is ongoing day in and day

21 out.

22 Q That's just learn from your mistakes type training on

23 the job, correct?

24 MR. VERWOLF: Object to characterization.

25 MR. ALLEN: Object to form of the question.

1 A It's learn on the job, not by mistakes.  
 2 Q You learn from your mistakes though, which is why you  
 3 do an investigation of mistakes, correct?  
 4 MR. VERWOLF: Objection, argumentative.  
 5 MR. ALLEN: Join the objection.  
 6 A Sure, we try to learn from our mistakes.  
 7 Q You not only learn from your mistakes, but you also  
 8 learn from other people's in the industry's mistakes  
 9 as well, correct?  
 10 A That's a wise thing to do, yes.  
 11 Q Not only is it wise, it actually is done at Olympic.  
 12 They'll send around memos and they'll have seminars  
 13 talking about some of the other spills in the country,  
 14 New Jersey and those kind of places, correct?  
 15 A Yes.  
 16 Q You actually had a seminar on the 1992 spill in New  
 17 Jersey, didn't you?  
 18 A Not that I recall.  
 19 Q Was that part of a seminar or any training that you  
 20 had, was information on the 1992 spill in New Jersey?  
 21 A Not that I recall.  
 22 Q You never had that given to you as an example of a  
 23 learning tool to avoid some of the mistakes that  
 24 happened in New Jersey?  
 25 A I may have. I recall a document on a spill from the

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(LLOYD TIEKEN - BY MR. BENINGER)

1 you learn from the mistakes they made in dealing with  
 2 those ones, correct?  
 3 A That was more for field personnel targeting. It was  
 4 targeting field personnel.  
 5 Q Were you involved in that seminar?  
 6 A I was able to attend one of them.  
 7 Q By being able, you mean your employer, Olympic Pipe  
 8 Line, only let's you attend one of the seminars put on  
 9 by DOE for spill response?  
 10 A No, I could attend whatever seminar I wanted to at any  
 11 point in time.  
 12 Q Did Olympic Pipe Line make it mandatory for you to  
 13 attend or was it just if you want to go, fine; if you  
 14 don't want to go, fine, too?  
 15 A Some meetings were mandatory and some weren't. Which  
 16 ones were mandatory, I don't know.  
 17 Q I'm trying to get a little bit of a handle as to what  
 18 sort of program Olympic had in place before June 10th  
 19 to help train people to do their job better, whether  
 20 it's a refresher course or simulators or seminars they  
 21 would put on, anything like that?  
 22 A There was -- I do now -- you've kind of piqued my  
 23 memory. They were required, on initial training  
 24 before certification, to complete a computer based  
 25 training module.

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1 NTSB belonging to Colonial Pipeline for review, but I  
 2 didn't, you know, really view it as a training as much  
 3 as just an overview of, you know --  
 4 Q What sort of training did Olympic have set up then for  
 5 you operators to learn from either your mistakes or  
 6 other people's mistakes? Was there any?  
 7 A Just what I've mentioned.  
 8 Q What did you mention?  
 9 A What we've gone over.  
 10 Q No, no, we've gone over things after the June 10th  
 11 catastrophe. I'm trying to figure out before June  
 12 10th, what kind of training or seminars or ongoing  
 13 education did Olympic have to help you all figure out  
 14 here's other mistakes from other people; how can we  
 15 avoid this in our company?  
 16 A No.  
 17 Q None from Olympic, correct?  
 18 A No.  
 19 Q How about -- didn't the DOE, didn't they put on  
 20 seminars for you?  
 21 A DOE, Department of --  
 22 Ecology.  
 23 A Ecology? Actually, spill response training, yes.  
 24 Q And as part of that spill response training they  
 25 brought up some other spills in the country to help

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(LLOYD TIEKEN - BY MR. BENINGER)

1 Q And the computer based training module was designed to  
 2 do what?  
 3 A Called CBT, and, actually, we had to do that again.  
 4 That is yet another piece of training that we had to  
 5 do again as well post June 10th as a refresher.  
 6 Q What is the CBT, the computer based training module?  
 7 A It covers a variety of issues of the pipeline  
 8 operation, alignment. You know, it covers DOT rules  
 9 and regulations. A basic, you know, how to operate a  
 10 pipeline. You know, just pipeline in general.  
 11 Q Is this a simulator that you're able to use or is it  
 12 from books?  
 13 A It's on a PC.  
 14 Q And is that what you did before your initial  
 15 certification in '94? Was that when it was?  
 16 A Yes.  
 17 Q And since '94, your initial certified, any refresher  
 18 courses to go back through and retrain on this or  
 19 update it or anything like that?  
 20 A No.  
 21 Q So since 1994, you had received no other further  
 22 computer based training; is that correct?  
 23 A No.  
 24 Q And Olympic Pipe Line didn't make it mandatory for  
 25 once a year or once every two years or on any periodic

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1 basis, to go through some additional training on a  
2 computer based training or a leak detection simulator  
3 or anything like that?

4 A No.

5 Q No regular training of any type from Olympic Pipe  
6 Line, correct, that was mandatory?

7 A Correct.

8 MR. DAHL: This is the end of tape No. 1 in  
9 the deposition of Lloyd Tieken. The time is  
10 approximately 12:01 p.m. Going off the record.

11 (Lunch recess taken at 12:01 p.m.)

12 (Exit Mr. Platis.)

13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

1 was it.

2 Q Would you be willing to meet with me off the record as  
3 well with the presence of your attorney?

4 A If my attorney thinks it's appropriate, you know. If  
5 he advises that that is, you know, okay.

6 Q You wouldn't have any problem doing that, would you?

7 A No, I wouldn't.

8 Q You talked about you're negotiating for a raise with  
9 the new management of the Olympic Pipe Line, correct?

10 A I intend to.

11 Q Have you notified them that you intend to?

12 A No.

13 Q The salary that you're currently making, is that the  
14 same that you made under the Equilon management for  
15 Olympic Pipe Line?

16 A Yes.

17 Q In addition to working in the, I guess -- what is your  
18 job title going to be in the future here?

19 A Pipeline controller.

20 Q You were on a special assignment. Is that going to be  
21 a permanent assignment in the SCADA system?

22 A I don't know.

23 Q That's currently what you're doing though, correct?

24 A I am currently a pipeline controller.

25 Q But are you assigned still to maintaining the SCADA

1 AFTERNOON SESSION

2 1:08 P.M.

3 --ccOoo--

4 MR. DAHL: Back on the record. This is the  
5 beginning of tape No. 2 in the deposition of Lloyd  
6 Tieken. The time is approximately 1:08 p.m.

7 CONTINUED EXAMINATION

8 BY MR. BENINGER:

9 Q All right, Mr. Tieken, we'll go back on the record and  
10 continue with your deposition. During the lunch hour  
11 did you think of anything that you needed to change,  
12 anything you needed to add to that we talked about  
13 earlier?

14 A No.

15 Q One of the things we talked about early on in your  
16 deposition was the fact that you had met with  
17 attorneys for Olympic Pipe Line for some ten hours; is  
18 that right?

19 A Yes.

20 Q How long ago was that?

21 A Within the last two weeks.

22 Q Who was present beside your attorney and the attorney  
23 for Olympic Pipe Line?

24 A Let's see. There was Nick or, excuse me, Chris  
25 Nichols, excuse me. And, let's see, I believe that

1 system?

2 A Not really, no.

3 Q Are you back doing shifts in the control room?

4 A Yes.

5 Q How long after the July or June 10th occurrence did  
6 you go back to your regular duties as a controller in  
7 the control room?

8 A I don't recall. Off and on. I was in and out, you  
9 know, and I can't tell you exactly what my schedule  
10 was, but it was, it was pretty much right after that,  
11 right after the incident that I went back to the  
12 Control Center for duration.

13 Q And are you on the segment 1, are you on the mainline  
14 or which ones do you do when you're in the control  
15 room?

16 A Segment 1 or the -- one of the major pieces of segment  
17 1 has been shut down since June 10th, so --

18 Q Is that the 16 inch line up north of Allen?

19 A Between Allen and Renton, that's correct, and then, of  
20 course, from Allen to Ferndale to Cherry Point as well  
21 is out, but now the line does both. Both segment 1  
22 delivery facilities as well as mainline facilities are  
23 serviced via the 20 inch.

24 Q So are both operators operating what I call the  
25 mainline now?



1 A Yes.  
 2 Q And is that going to remain a permanent condition or  
 3 once the other segment, the 16 inch line comes back  
 4 on, do they intend to split those functions back up  
 5 again between the controllers?  
 6 A I don't know what BP plans to do.  
 7 Q Your job then now is to once again be running the  
 8 pipeline, correct?  
 9 A Correct.  
 10 Q To do your job you need to know that the equipment  
 11 that you're using is safe to do it in a safe manner,  
 12 correct?  
 13 A Yes.  
 14 Q And you wouldn't run an unsafe pipeline, would you?  
 15 A No.  
 16 Q Let me go back then because we know that what occurred  
 17 June 10th, 1999, was a tragedy, wasn't it?  
 18 A Yes.  
 19 Q And in order for you to feel comfortable to go back to  
 20 operate this pipeline, you would want to make sure  
 21 that it is, in fact, safe and that tragedy isn't going  
 22 to be repeated, wouldn't you?  
 23 A Yes.  
 24 Q What steps have you done to determine the cause of  
 25 that tragedy on June 10th, 1999?

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(LLOYD TIEKEN - BY MR. BENINGER)

1 A I don't know.  
 2 Q So if you don't know what caused the occurrence, how  
 3 can you be sure that the pipeline is now safe to  
 4 operate?  
 5 A I can never be 100 percent positive. At any point in  
 6 time someone can damage the pipe unbeknownst to me.  
 7 Q Again, is it your assumption that the reason the June  
 8 10th occurrence happened was because of damage to the  
 9 pipe?  
 10 A I believe it. I believe that the pipe had been  
 11 damaged, yes.  
 12 Q So is your belief that the cause of the June 10th,  
 13 1999, occurrence was because of damage to the pipe?  
 14 That's it?  
 15 A That is my personal belief, yes.  
 16 Q Any other reason that the June 10th, 1999, rupture and  
 17 deaths occurred other than damage to the pipe?  
 18 A No.  
 19 Q Why didn't Olympic find the damage to the pipe if it's  
 20 really a safe pipeline?  
 21 MR. ALLEN: Object to the form of the  
 22 question. No foundation.  
 23 A I don't know.  
 24 Q Why didn't Olympic fix the pipe if it's damage to the  
 25 pipeline?

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1 A I personally just pay attention to the information  
 2 that's published, you know.  
 3 Q How do you know the pipeline is safe now?  
 4 A Well, we have -- well, we have run tool runs. We have  
 5 done MFL tool runs, magniflex tool runs, caliper tool  
 6 runs, things like that, which are instruments that  
 7 tell us the health of the pipe itself.  
 8 Q So are you saying to me that the reason that this  
 9 occurred, this tragedy occurred before, was because  
 10 the pipe itself wasn't healthy? That's why?  
 11 A No, I'm not telling you the reason it happened at all.  
 12 Q If you don't know the reason, then how do you know  
 13 it's safe now?  
 14 A Well, I would like to see the official results of, you  
 15 know, why the pipe failed from NTSB, but I haven't  
 16 seen that.  
 17 Q That, again, is just focused on the pipe itself,  
 18 correct?  
 19 A Correct.  
 20 Q Let me just ask you in a straightforward, broad  
 21 question. What caused the June 10th, 1999,  
 22 occurrence?  
 23 MR. VERWOLF: Objection, no foundation.  
 24 MR. ALLEN: Join the objection, no  
 25 foundation.

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(LLOYD TIEKEN - BY MR. BENINGER)

1 A I don't know.  
 2 Q If you don't know any of those, how do you know there  
 3 still isn't damage that they haven't found that they  
 4 haven't fixed?  
 5 A I don't.  
 6 Q So are you just willing to just simply keep running  
 7 the pipeline with the same level of assurance that you  
 8 had before this tragedy as you sit here now?  
 9 MR. VERWOLF: Objection. Argumentative.  
 10 MR. ALLEN: Join the objection.  
 11 A Would you rephrase that or repeat?  
 12 Q Sure. Can you tell us that this pipeline is now safe  
 13 to operate?  
 14 A I believe it is.  
 15 Q Based upon what?  
 16 A Based upon the maintenance, just based upon the  
 17 knowledge that the people responsible for keeping the  
 18 pipeline healthy and all the checks and balances in  
 19 place are doing their job.  
 20 Q These checks and balances were all there before,  
 21 weren't they?  
 22 A Yes.  
 23 Q And the people were all there before, weren't they?  
 24 A Yes.  
 25 Q So what's changed between the tragedy and now that you

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1 can give an assurance that this pipeline is safe?  
 2 Same people, same checks and balances. What's  
 3 changed?  
 4 A The only thing that I'm aware that has changed is we  
 5 have by agreement stepped up, I believe in response to  
 6 an agreement with the city of Bellingham, we have  
 7 stepped up the smart tool runs through the system  
 8 which tell us the condition of the piping, and I  
 9 believe that's the case.  
 10 Q So that's it. So you think the difference between the  
 11 tragedy that occurred and now as to why this is safe  
 12 is because they've stepped up the smart pig runs?  
 13 A Not the difference. A difference.  
 14 Q What other differences? The smart pig you say is one  
 15 that gives you a level of safety to be able to operate  
 16 this through neighborhoods and parks, correct?  
 17 A Uh-huh.  
 18 Q Does that mean yes?  
 19 A Yes.  
 20 Q Thank you. Other than smart pigs, what else?  
 21 A Cathodic protection.  
 22 Q Other than smart pigs and cathodic protection, what  
 23 other changes have been made that assure that this  
 24 line is now safer than it was back in June, 1999?  
 25 A We are operating at 80 percent of maximum operating

1 data?  
 2 A No.  
 3 Q So if you had smart pigs before the tragedy in June,  
 4 correct?  
 5 A Yes.  
 6 Q And you still have smart pigs now but you're not aware  
 7 of any changes that have been made in the way that  
 8 they analyze or respond to the data, how can you say  
 9 the smart pigs do any difference?  
 10 A I believe the, as the use of smart tools has, you  
 11 know, grown, that business, that the tools have become  
 12 smarter, greater resolution, more reliable, etc., I  
 13 think the technology itself has become more reliable.  
 14 Q Are you saying that the problem before was that the  
 15 data itself didn't tell enough information on the  
 16 defect or just that it wasn't responded to?  
 17 A I'm no expert on smart tools. I'm not saying any  
 18 specific element bears any responsibility.  
 19 Q But I need to go through, I want to go through and  
 20 find out why you think that this line is safe to  
 21 operate now, and one of these is you claim the use of  
 22 the smart pigs. The smart pigs have been around  
 23 before, correct?  
 24 A Well, yes.  
 25 Q So what now has made this different? Use of a smart

1 pressure, so we're operating at lower pressure  
 2 systemwide by 20 percent margin.  
 3 Q Smart pigs, cathodic protection and 80 percent of MOP.  
 4 Anything else?  
 5 A No.  
 6 Q You're aware that there were smart pig runs before  
 7 this tragedy on the pipeline, aren't you?  
 8 A Yes.  
 9 Q And you're aware that those smart pig runs had given  
 10 information back to Olympic to make decisions on as to  
 11 what they're going to do about it, correct?  
 12 A Yes.  
 13 Q Are you aware that there were discussions between  
 14 Olympic supervisory personnel and the DOE on actually  
 15 going and inspecting certain defects right where the  
 16 rupture occurred?  
 17 A Repeat that, please.  
 18 Q Sure. Are you aware in '96 and '97 of correspondence  
 19 between DOE and Olympic to go out and inspect certain  
 20 defects they found near the water treatment plant in  
 21 Bellingham?  
 22 MR. VERWOLF: Objection, no foundation.  
 23 A No.  
 24 Q Are you aware of changes that have been made and the  
 25 procedure that Olympic uses to evaluate the smart pig

1 pig somehow makes the line safe where it wasn't safe  
 2 before?  
 3 MR. ALLEN: Object to the form of the  
 4 question.  
 5 MR. VERWOLF: Asked and answered.  
 6 Q Go ahead.  
 7 A Please repeat.  
 8 Q What is it now about the smart pigs that you believe  
 9 make the line safe, safer than the use of the smart  
 10 pigs was before June, 1999?  
 11 MR. ALLEN: Same objection. Asked and  
 12 answered.  
 13 A The technology of the tools themselves.  
 14 Q And so you think that the technology -- you mean  
 15 technology as far as identifying problems in the line,  
 16 correct?  
 17 A I mean technology in the entire process, the tool  
 18 itself, perhaps, you know, the way the technicians  
 19 interpret the data. I don't know. I'm no expert on  
 20 tools. That's out of my field of knowledge really.  
 21 Q I understand, but as the operator, the person running  
 22 the pipeline and having to run it in a safe manner, I  
 23 want to know what it is about these smart pigs now in  
 24 one year's time that has given you this confidence  
 25 that the pipeline can be run safely?

- 1 A I've never lost any confidence that the pipelines can  
2 be run safely. Right out of the box these pipelines  
3 are tested to double pretty much twice the burst  
4 pressure of what they're actually operated at and  
5 they're set to be protected not to exceed that. I  
6 really have never lost --
- 7 Q These tests didn't do the citizens of Bellingham much  
8 good on June 10th, did it?
- 9 A No.
- 10 Q So now let's go back through to see what we do to  
11 safeguard the operation to the pipeline, and one of  
12 the things you mentioned is the use of the, of this  
13 new and improved smart pig; is that right?
- 14 A Yes.
- 15 Q But I need to figure out what exactly it is about the  
16 use of the smart pig now compared to '96 and '97 that  
17 somehow gives you a level of comfort that this rupture  
18 and explosion will never happen again?
- 19 MR. VERWOLF: Objection, asked and answered.
- 20 MR. ALLEN: Same objection.
- 21 Q Go ahead.
- 22 A One other facet in this is the passage of time. The  
23 pipeline could have been damaged and covered in the  
24 interim between when the last tool was run and now, so  
25 the most current the run, the better I feel.

(LLOYD TIEKEN - BY MR. BENINGER)

- 1 A I didn't catch the question.
- 2 Q Let me do it a little bit this way: It doesn't do,  
3 for safety processes, it doesn't do Olympic much good  
4 just to be informed of construction work along the  
5 pipeline if they're not going to send somebody out  
6 there to monitor the activities, correct?
- 7 A I can't -- I can't answer that.
- 8 Q It's common sense.
- 9 MR. ALLEN: Objection to the form of the  
10 question. Argumentative.
- 11 Q Don't you agree?
- 12 A No.
- 13 Q Let's go back to what we just talked about. You were  
14 saying you could just run a smart pig once and as long  
15 as everybody notified Olympic when they were going to  
16 dig around their pipe, everything would be just fine,  
17 correct?
- 18 A Correct.
- 19 Q That only is an accurate statement if Olympic sends  
20 somebody out to monitor that activity when it's going  
21 on and ensure that the pipeline doesn't get hit during  
22 the process, correct?
- 23 A I -- yes.
- 24 Q Because just notifying Olympic doesn't do anything for  
25 protecting that pipe, does it?

- 1 Q So you think that smart pigs should be run on a  
2 regular basis to ensure that damage doesn't happen in  
3 between runs, correct?
- 4 MR. VERWOLF: Objection, no foundation.
- 5 MR. ALLEN: Object to the form of the  
6 question. Argumentative.
- 7 A I don't.
- 8 Q How often should they be run then in order to give you  
9 that level of security to run a safe pipeline?
- 10 MR. ALLEN: Object to the form of the  
11 question. No foundation.
- 12 Q Go ahead.
- 13 A I believe if a -- a smart tool run actually may only  
14 need to be run once when the pipeline is built. If  
15 the checks and balances were in place so that no one  
16 could get near our pipelines underground without us  
17 being made aware of it, fully aware of it at all  
18 points in time, any time they're closed, then I  
19 believe that even just once would be enough.
- 20 Q And it doesn't -- I guess we've talked about this a  
21 little bit before. Detection and response, they've  
22 got to go hand in glove for any real safe procedure to  
23 be involved, right?
- 24 MR. ALLEN: Objection to the form of the  
25 question. It's vague and ambiguous.

(LLOYD TIEKEN - BY MR. BENINGER)

- 1 A No.
- 2 Q Okay, so it's not just a matter of detection, but it's  
3 a matter of responding to any sort of potential harm  
4 to that pipe that's important, isn't it?
- 5 A Yes.
- 6 Q What has Olympic done that you're aware of since the  
7 June 10th explosion to increase their monitoring of  
8 any potential digging around the pipeline?
- 9 MR. VERWOLF: Objection, no foundation.
- 10 MR. ALLEN: Join the objection.
- 11 A I don't know.
- 12 Q So you're not aware of any changes that have been made  
13 in the monitoring program at Olympic for any third  
14 party excavation along their pipeline, correct?
- 15 A Correct.
- 16 Q You're not aware of any changes in the analysis of the  
17 smart pig data by Olympic since the June 10th tragedy,  
18 are you?
- 19 A No.
- 20 Q And you're not aware of any different smart pigs that  
21 were used in the pipeline since June 10th, are you?
- 22 A Yes.
- 23 Q And are you aware of that smart pig revealing a defect  
24 that wasn't revealed before?
- 25 A No.

1 Q So let's see if we can go to cathodic protection. Did  
 2 the lack of cathodic protection cause this rupture and  
 3 explosion?  
 4 A I don't know.  
 5 Q Okay. What was wrong with the cathodic protection  
 6 before?  
 7 A I am unaware of any problem with the cathodic  
 8 protection.  
 9 Q What has changed in the cathodic protection that gives  
 10 you this increased level of safety now?  
 11 A Nothing. It's working fine as far as I know.  
 12 Q Then is it the fact that this is, the pipeline is now  
 13 only operating at 80 percent of the maximum operating  
 14 pressure that gives you the level of comfort to think  
 15 that this pipeline can be run safely compared to June  
 16 10th, 1999?  
 17 A No. It's a number of things. That's part of it, but  
 18 it's also the design and the engineering of the system  
 19 as well as the, all of the fail-safes that are in  
 20 place. First of all, like I said, it's tested out.  
 21 It's hydrotested out to a certain pressure which is  
 22 maintained, and then approved to operate substantially  
 23 lower than that, something along 80 percent less than  
 24 that, so there's that full 80 percent margin of error  
 25 on top of that.

1 MR. WOLFE: There is no basis for this man  
 2 to be offering expert testimony.  
 3 Q Go ahead.  
 4 MR. ALLEN: Join the objection.  
 5 A Repeat, please.  
 6 Q Sure. What has changed between July or June 10th and  
 7 now in the design and engineering of the pipeline that  
 8 leads you to believe it can be operated safely?  
 9 A Nothing.  
 10 Q Okay. Now that we've gone through -- other than what  
 11 we've just gone through, is there anything that you  
 12 can point to that's changed between June 10th and now  
 13 that leads you to believe the pipeline could be  
 14 operated safely?  
 15 A I'll restate. I've never felt that the pipeline  
 16 couldn't be operated safely.  
 17 Q But it wasn't, was it?  
 18 A Yes, it was.  
 19 Q You believe on June 10th the pipeline was operated  
 20 safely?  
 21 A Yes, I do.  
 22 Q And you believe on June 10th when it was operated  
 23 safely, then why did three people die? What caused  
 24 three people to die?  
 25 A I don't know.

1 Q That didn't do these three little boys that died any  
 2 good, did it?  
 3 MR. ALLEN: Objection, argumentative.  
 4 Q Did it?  
 5 A No.  
 6 Q So I'm trying to figure out now, compared to right  
 7 before these boys were burned to death, as to what's  
 8 changed that you can say the pipeline can be operated  
 9 safely?  
 10 MR. VERWOLF: Asked and answered.  
 11 MR. ALLEN: Objection.  
 12 Q I thought it was asked and answered but now we're  
 13 getting a number of other things besides smart pigs,  
 14 cathodic protection, 80 percent MOP and the passage of  
 15 time. Anything besides those three things?  
 16 A Did you list design and engineering?  
 17 Q I was listing what you told me and that was added in a  
 18 second ago, right?  
 19 A Yeah, yeah.  
 20 Q Let me get into design and engineering. What has  
 21 changed in the design and engineering of this pipeline  
 22 from July 10th to the present that gives you a level  
 23 of safety?  
 24 MR. WOLFE: I object to foundation.  
 25 MR. ALLEN: Yeah.

1 Q But you've already closed your mind to the fact that  
 2 it might have been operator error? Is that what I'm  
 3 hearing?  
 4 MR. VERWOLF: Objection, argumentative.  
 5 MR. ALLEN: Same objection. Argumentative.  
 6 A Yes.  
 7 Q You have closed your mind to that?  
 8 A Yes.  
 9 Q What is that based on, the investigation that you did?  
 10 A Based on my knowledge of the system. Even if there  
 11 was no operator intervention, the system is designed  
 12 to protect itself and shut down without ever being  
 13 able -- without any human intervention whatsoever.  
 14 Q Did it shut down?  
 15 A Did it?  
 16 Q Yes.  
 17 A I don't know.  
 18 Q How would you know that? You were in the control  
 19 room, weren't you? You were in the SCADA room?  
 20 A I was in the computer room attending to the computers.  
 21 Q And you had no idea whether the system was up or down?  
 22 A No, sir.  
 23 Q When did you first learn that there was a leak?  
 24 A I believe around 1630.  
 25 Q Around 4:30?

1 A Yes, sir.

2 Q How did you learn there was a leak?

3 A Kevin Dyvig met Ron Brentson and I in the hallway

4 outside of the Control Center and made the statement

5 that gasoline has been reported in Whatcom Creek by

6 Rick Kiene.

7 Q Rick Kiene reported that gasoline had been reported --

8 A No, that he saw gasoline in Whatcom Creek.

9 Q So you and the control room, at that point in time,

10 knew it was your gasoline from Olympic Pipe Line; is

11 that right?

12 A I wasn't in the control room.

13 Q You, as well as the other people, the other

14 controllers and supervisors at Olympic Pipe Line, knew

15 that the gasoline in Whatcom Creek was from your

16 pipeline?

17 A Since we had the only pipeline in the neighborhood

18 that was our -- well, I don't know.

19 Q What did you think at the time?

20 A Well, I felt that we had the only pipeline in the

21 neighborhood so if it was true, that there was a

22 likelihood, yes.

23 Q And so if I'm understanding right, the people in the

24 control room, the first time they understand that

25 their pipeline is ruptured is from a report by

(LLOYD TIEKEN - BY MR. BENINGER)

1 A No.

2 Q Had they told you that the pipeline had been shut

3 down?

4 A Kevin mentioned that he had shut the system down prior

5 to Rick calling.

6 Q I thought the system was supposed to shut down

7 automatically if there was a leak or a rupture?

8 MR. VERWOLF: Objection. Assumes the

9 shutdown was a result of the leak or rupture.

10 Q I thought you told me earlier the system was set up so

11 that it would automatically shut down in the event of

12 a rupture?

13 A I never said that.

14 Q Is the system set up to do that?

15 A No.

16 Q So you can have a rupture and the system just keeps

17 pumping? Is that what I'm hearing you say?

18 A No, let me backtrack. Yes, the system should shut

19 down in the event of a large leak.

20 Q And by large leak, you mean what kind of a leak?

21 A Well, I would rather not get into that because then

22 you're talking, you know, very individual system

23 characteristics, you know. A full pipe breakage, for

24 example, should -- will shut down a pump station.

25 Q Kind of like what we had here on June 10th, right?

1 somebody else that they see it in the water?

2 MR. ALLEN: Object to the form of the

3 question.

4 MR. VERWOLF: Object, no foundation.

5 MR. ALLEN: No foundation.

6 Q Is that right?

7 A I don't know.

8 Q You didn't see anything on the SCADA system that

9 indicated there has been a rupture and leak?

10 A SCADA system is separate from the pipeline control

11 side.

12 Q You didn't see anything, any alarms, no alarms that

13 were in the computer room, correct?

14 A Correct.

15 Q And you had received no information from anybody that

16 there was a rupture and potential leak before Rick

17 Kiene called in, correct?

18 A No. Before Kevin informed us in the hallway.

19 Q And Kevin's report was solely off of Rick Kiene's

20 observations, correct?

21 A I don't know.

22 Q When you heard the discussion between Kevin Dyvig and

23 Ron Brentson and yourself, was there any discussion as

24 to that there's notification or an alarm of a leak on

25 the system?

(LLOYD TIEKEN - BY MR. BENINGER)

1 A Yes.

2 Q Let's say you lose one to five percent, you leak one

3 to five percent of the volume flow. Is that enough to

4 trigger an automatic shutdown?

5 MR. ALLEN: Object to the form of the

6 question. No foundation.

7 A I don't know.

8 Q You're a controller. You don't know what the

9 operating parameters are for automatic shutdown for a

10 leak?

11 A I do. However, it's dynamic.

12 Q Meaning what?

13 A The pipeline isn't always operated at X amount of

14 pressure here and X amount of pressure here. At any

15 given point in time that pressure is variable.

16 Depending on where the leak might occur, you know, one

17 to five percent may be enough.

18 Q And it may not?

19 A And it may not.

20 Q So you've got -- actually, what type of leak detective

21 system do you have on this pipeline or did you back in

22 June of 1999?

23 A We do.

24 Q Same one as you did in '99?

25 A Yes.

1 Q What was it?

2 A It's a model comparative system built by Modisette &  
3 Associates.

4 Q How does it function?

5 A It basically creates -- it's got a database that  
6 creates a mathematical profile of the pipeline system  
7 and it compares what it thinks flow in vs. flow out  
8 based on telemetered values fed into it as well as  
9 constant values that exist in its profile, be that  
10 elevation, ground temperature, etc., and compares its  
11 flow in, its calculated flow in, flow out vs. realtime  
12 net flow in, net flow out, and basically publishes a  
13 difference between the two.

14 Q What margin of error does it have for detection?

15 A I don't know.

16 Q If the computer system is not responding or responds  
17 slowly, is the leak detection system going to be tied  
18 into that?

19 A Yes.

20 Q So if you're having a problem with OLY01 and OLY02,  
21 that's also going to lead to a problem with the leak  
22 detector system reporting its values back to the  
23 control room, correct?

24 A I believe so.

25 Q Do you know if the problems with the computers led to

1 foundation.

2 MR. ALLEN: Join the objection.

3 A No.

4 Q I mean before you decide that you're going to go and  
5 continue to operate a pipeline that has resulted in  
6 the death of three people and burned a mile and a half  
7 swathway through a park in a city, don't you think it  
8 would be reasonable for you to try to figure out what  
9 other potential causes there may have been to this  
10 accident?

11 MR. VERWOLF: Objection, argumentative.

12 MR. ALLEN: Argumentative and no foundation.

13 Q Go ahead.

14 A I believe that that is being done. I just believe  
15 it's complex enough that the results aren't published  
16 yet.

17 Q In fact, you don't have any of the results being in  
18 and it's 14 months afterwards, correct?

19 A Yes.

20 Q And you keep operating the same pipeline with the same  
21 checks and balances with the same personnel with the  
22 same smart pigs and the same cathodic protection and  
23 the same design and engineering that you had when this  
24 tragedy occurred, aren't you?

25 MR. VERWOLF: Objection, argumentative.

1 a slow response or slow detection by the controllers  
2 in the control room as to the leak in this case?

3 MR. VERWOLF: Objection, compound.

4 A I don't know.

5 Q Was your understanding though that Mr. Dyvig was the  
6 one that shut down the system, not the system shutting  
7 itself down automatically, correct?

8 A Yes.

9 Q Did you have an understanding as to when he or  
10 somebody else shut the system on or turned the system  
11 on?

12 A No.

13 Q Had you been made aware that, in fact, the pumps had  
14 been turned on two times before the explosion and  
15 burning of these children occurred?

16 MR. VERWOLF: Objection, no foundation and  
17 argumentative.

18 MR. ALLEN: Join the objection.

19 A No.

20 Q You'd never been told that?

21 A No.

22 Q If you learned that, doesn't that raise some questions  
23 in your mind as to whether there may have been some  
24 operator problems that led to this unsafe condition?

25 MR. VERWOLF: Objection, speculation, no

1 Contrary to his testimony.

2 MR. ALLEN: Objection.

3 A Yes.

4 Q So what is it then that gives you the assurance that  
5 this really can be done safely and we're not about to  
6 have another Bellingham explosion?

7 MR. ALLEN: Objection, asked and answered.

8 A The fact that it had been operated safely for 30 some  
9 years prior carries some weight in my mind.

10 Q Is that all the weight? Is there anything else that  
11 you're relying upon for the hope that this tragedy  
12 doesn't occur again other than you did it 34 years  
13 without killing somebody?

14 A No.

15 Q In fact, during those 34 years you had 43 spills,  
16 didn't you?

17 MR. VERWOLF: Objection, no foundation.

18 A I don't know.

19 Q Do you know how many spills there were in those 34  
20 years?

21 A I don't.

22 Q If there were more than 10, would that cause you some  
23 concern that it could be operated safely?

24 MR. ALLEN: Objection, no foundation,  
25 argumentative.

- 1 A I would have to know specifics.
- 2 Q Here's the problem I have, is you're relying on 34
- 3 years of operation and whatever that record was to
- 4 give you your level of safety that it can still be
- 5 operated safely now, aren't you?
- 6 MR. ALLEN: Object to the form of the
- 7 question. Argumentative.
- 8 A No.
- 9 Q Isn't that what you just said, that the fact that it
- 10 had been run for 34 years is given, I think you said,
- 11 considerable weight?
- 12 A That is part of the equation but only part.
- 13 Q Let's focus on that part then. I want to see how
- 14 strong that survives scrutiny, that 34 year history.
- 15 How many spills are you aware of during that time?
- 16 A One since, that I've been here that I've actually, you
- 17 know, been here during, and --
- 18 Q One since the June 10th, correct?
- 19 A No.
- 20 Q You were aware of the spill at the Renton facilities,
- 21 weren't you?
- 22 A Yes.
- 23 Q So that's at least one since June 10th that you're
- 24 aware of, correct?
- 25 A Yes.

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(LLOYD TIEKEN - BY MR. BENINGER)

- 1 were they, on June 10th?
- 2 MR. ALLEN: Object to the form of the
- 3 question. Argumentative.
- 4 A No.
- 5 Q And the public wasn't aware of the fact that there
- 6 were smart pig runs before June of 1997, were they?
- 7 MR. ALLEN: Same objection.
- 8 A No.
- 9 Q And the public wasn't aware that DOE had requested
- 10 that Olympic go in and inspect the defect right by the
- 11 water treatment plant where this rupture occurred,
- 12 were they?
- 13 MR. VERWOLF: Same objection.
- 14 Argumentative.
- 15 A I don't know.
- 16 Q And the public hadn't been made aware of the fact you
- 17 put a new Bayview Station in that had all kinds of
- 18 problems, had they?
- 19 MR. ALLEN: Objection. Argumentative, no
- 20 foundation.
- 21 A I don't know.
- 22 Q Let's talk about that a little bit. Bayview Station,
- 23 big problem, hadn't it been?
- 24 MR. VERWOLF: Objection.
- 25 MR. ALLEN: Objection.

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- 1 Q How about before? How about in the time that you've
- 2 been there before? If you're really relying on the
- 3 past history, what do you know about the leaks and
- 4 spills in that past history?
- 5 MR. ALLEN: Object to the form.
- 6 Argumentative.
- 7 A I -- it is my understanding that the lion's share of
- 8 the bulk of the previous spills and problems we had
- 9 were due to third party damage.
- 10 Q You are aware then of a number of spills and problems
- 11 that you had before June 10th, aren't you then?
- 12 A Hearsay.
- 13 Q And that hearsay then, you believe that those spills
- 14 and problems that you're aware of were third party
- 15 damage is what you're thinking?
- 16 A Yes, some of them.
- 17 Q How about the Ebby Slough? Are you aware of the spill
- 18 at the Ebby Slough?
- 19 A No.
- 20 Q So do you think that -- is there some new system that
- 21 you have in place to prevent third party damage that
- 22 gives you the assurance that the prior history
- 23 wouldn't simply be repeating itself?
- 24 A Well, I'm hoping public awareness will play a role.
- 25 Q But the public wasn't in charge of the control room,

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(LLOYD TIEKEN - BY MR. BENINGER)

- 1 A Define big.
- 2 Q It's a problem. We can agree on that?
- 3 A I can't say a problem.
- 4 Q Is it being used?
- 5 A Currently, no.
- 6 Q Hmm, if it's not a problem, why isn't it being used?
- 7 A Good question.
- 8 Q What did it cost, 20 million dollars?
- 9 A I don't know.
- 10 Q That's a rough ballpark, isn't it?
- 11 MR. VERWOLF: Objection, no foundation.
- 12 Asked and answered.
- 13 A I don't know.
- 14 Q Are you telling me that you're not aware of any
- 15 problems with Bayview as to why it's not being used
- 16 now?
- 17 A No.
- 18 Q There are problems there, aren't there?
- 19 A I don't know if I would characterize them as problems.
- 20 Q How would you characterize them?
- 21 A Um --
- 22 Q How would you characterize them?
- 23 A Perhaps poor design.
- 24 Q Perhaps a poor design? Did perhaps poor design cause
- 25 a lot of frustration among the operators and

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1 controllers before this explosion?  
 2 A There was some frustration, yes.  
 3 Q And what was the frustration over?  
 4 A Basically, I can only -- actually, I don't know,  
 5 except for personally I can only speak for myself.  
 6 Q Okay, go ahead. You actually wrote some memos on  
 7 this, didn't you?  
 8 A I have.  
 9 Q About Bayview and the incoming lines and things,  
 10 didn't you?  
 11 A Yes.  
 12 Q Why don't you tell us about that. What's the problems  
 13 that you were aware of with the Bayview Station?  
 14 A The only problems -- you know, I felt confident  
 15 operating the facility. You know, I feel like it did  
 16 what it was supposed to do and worked as well as it  
 17 could under what it was designed to do. The only  
 18 problem that I perceived personally was the facility's  
 19 proximity to Allen Pump Station.  
 20 Q You had problems with the valves opening and closing,  
 21 didn't you, on the commands?  
 22 A No.  
 23 Q You didn't have problems and write to people about  
 24 changing the valves so they could be opened or closed  
 25 with opened or closed commands issued from the Control

1 A Yes.  
 2 Q And the Bayview Station had only been in existence  
 3 for, what, six months before our explosion and deaths?  
 4 A Yes.  
 5 Q And during that time there had been, what, 50, 60  
 6 times that the valves had closed uncommanded?  
 7 A I don't know the exact count.  
 8 Q That's a ballpark though, rough ballpark, isn't it?  
 9 A That may be, yes. That may be.  
 10 Q And that breaks down to what? I mean 50, 60 times is  
 11 like a couple times a week, isn't it, for the six  
 12 months it's in operation?  
 13 A Those valves were closed uncommanded whether the  
 14 pipeline was running or not, you know.  
 15 Q Is that a good thing?  
 16 A Well, there were lots of times when those valves were  
 17 closed during testing and the pipeline was shut down.  
 18 Q Lots of times it was closed when the pipeline was  
 19 running, correct?  
 20 A I think there were some, yes.  
 21 Q And when it closes when it's running it sends a wave  
 22 up the pipeline that travels at, what, the speed of  
 23 sound, I think I remember from your training manuals?  
 24 A Correct.  
 25 MR. ALLEN: Object to the form of the

1 Center?  
 2 MR. VERWOLF: With regard to Bayview, are  
 3 you asking?  
 4 MR. BENINGER: Bayview, yes.  
 5 A I don't know if it was in regards to a problem. Could  
 6 you be more specific?  
 7 Q Are you aware of problems at Bayview which caused  
 8 valves to be opened or closed or cause any disruption  
 9 of the operating schedules?  
 10 MR. ALLEN: Objection to the form of the  
 11 question. Compound. Which question do you want him  
 12 to answer?  
 13 Q Go ahead.  
 14 A Yes.  
 15 Q And was this an ongoing problem expressed both by you  
 16 and the other dispatchers?  
 17 A Yes.  
 18 Q And there were even meetings that were going to be set  
 19 up to discuss the numerous problems that people were  
 20 having with the Bayview facility, but that meeting  
 21 wasn't set up until after or wasn't scheduled to take  
 22 place until after our explosion on June 10th, right?  
 23 A Yes.  
 24 Q And one of the problems had to do with valves closing  
 25 uncommanded a number of times, didn't they?

1 question. No foundation.  
 2 Q What kind of problem does that have or potential  
 3 problems does that create in a pipeline when you have  
 4 a valve close uncommanded with fuel in the line or  
 5 product in the line?  
 6 A It's dynamic. It depends on the status of the line  
 7 when the valve closes.  
 8 Q Fully operating, closes uncommanded full of product,  
 9 what potential problems?  
 10 A It will cause a degree of a pressure surge depending  
 11 on how far upstream the previous, the upstream  
 12 facility is, and as well as the speed at which the  
 13 valve closes.  
 14 Q From Bayview where is the upstream facility?  
 15 A Which upstream facility?  
 16 Q Nearest upstream facility?  
 17 A Anacortes.  
 18 Q How about going north of the line?  
 19 A Ferndale.  
 20 Q How far is that?  
 21 A You know, I don't know mileagewise. I can tell you  
 22 barrelwise.  
 23 Q Tell me barrelwise. How many barrels is that?  
 24 A About 48,000.  
 25 Q 48,000 barrels between Bayview and --



1 A Ferndale.  
 2 Q Bayview and Ferndale; is that correct?  
 3 A Yeah.  
 4 Q Along that section of the line how many check valves  
 5 are there?  
 6 MR. ALLEN: Between Bayview and Ferndale?  
 7 MR. BENINGER: Yes.  
 8 A I don't know.  
 9 Q Was that on that test that Frank Hopf gave you?  
 10 A It may be. I don't recall the questions specifically.  
 11 Q How many questions were on that test?  
 12 A Oh, 20, guesstimate.  
 13 Q What did Bayview, the Bayview Station have to do with  
 14 this catastrophe?  
 15 A I don't know.  
 16 Q You don't know what the operators had to do with the  
 17 catastrophe, correct?  
 18 A Correct.  
 19 Q You don't know what Bayview had to do with the  
 20 catastrophe, correct?  
 21 A Correct.  
 22 Q You don't know what the prior identified defects and  
 23 failure to fix those had to do with the catastrophe,  
 24 do you?  
 25 A Correct.

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(LLOYD TIEKEN - BY MR. BENINGER)

1 three million some dollars, correct?  
 2 MR. ALLEN: Object to the form of the  
 3 question. Misstates the fact.  
 4 Q You're aware of that? You work at the company, for  
 5 goodness sakes.  
 6 A I am.  
 7 MR. ALLEN: Argumentative.  
 8 Q That couldn't have possibly missed anyone's attention  
 9 that OPS was fining the company for a number of  
 10 different violations, correct?  
 11 MR. ALLEN: Objection, argumentative.  
 12 A I believe it was potentially.  
 13 Q But it couldn't have missed the attention of anyone at  
 14 that company that they're going to be fined a record  
 15 amount by OPS for the violations that have occurred  
 16 and been going on out there, correct?  
 17 MR. VERWOLF: Objection, argumentative.  
 18 MR. ALLEN: Objection, argumentative.  
 19 MR. MARTIN: No foundation.  
 20 A I don't know how to answer that.  
 21 Q It certainly didn't escape your attention, did it?  
 22 A I was aware of that.  
 23 Q Did Olympic post the "Notice of Probable Violations  
 24 and Proposed Civil Penalties" by the OPS so that all  
 25 the the controllers and operators and employees could

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1 Q Do you really feel like you know enough to be able to  
 2 believe that the line can be safely operated?  
 3 A Yes.  
 4 Q And you're going to say that whether you find out all  
 5 the results of the NTSB or the OPS or not, correct?  
 6 A Yes.  
 7 Q In fact, one of the things that you've -- are you  
 8 aware of the cite, the fine that was just issued by  
 9 OPS within the last, oh, month or two months?  
 10 MR. ALLEN: I object to the form of the  
 11 question. Misstates the facts.  
 12 Q Are you?  
 13 A More specifically?  
 14 Q What do you mean more specifically? You know OPS  
 15 issued a four million dollar fine, don't you, or three  
 16 million dollar fine?  
 17 MR. ALLEN: Objection, argumentative.  
 18 MR. VERWOLF: Object to the question. False  
 19 statement.  
 20 MR. BENINGER: What's false about it,  
 21 counsel?  
 22 MR. MARTIN: It's a notice of a potential  
 23 violation.  
 24 Q I'm sorry. You are aware that OPS issued a notice of  
 25 a potential violation in which they're fining Olympic

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(LLOYD TIEKEN - BY MR. BENINGER)

1 use it as a, what did you say, learning tool? Did  
 2 they post it anywhere so you could use it as a  
 3 learning tool?  
 4 A Yes. We had a copy of it in the Control Center.  
 5 Q So you then are aware of the fact that OPS noted a  
 6 number of problems at the Bayview Station regarding  
 7 the opening and closing of valves, correct? Correct?  
 8 A Being a potential in nature, I believe that, you know,  
 9 this had not been established concretely yet.  
 10 Q I'm sorry, did you use this as a learning tool or did  
 11 you disregard it because it was only potential?  
 12 A I read through it.  
 13 Q Did you use it as a learning tool or not?  
 14 A Yes.  
 15 MR. ALLEN: Object to the form of the  
 16 question. Vague.  
 17 Q So you didn't really put weight in the fact that it  
 18 was, as somebody mentioned, potential fine and things  
 19 to incorporate as a learning tool for you to make sure  
 20 that things are done safely, correct?  
 21 A Repeat that?  
 22 Q Sure. You didn't just say, oh, jee, I guess this is  
 23 just a probable violation? You didn't look at that  
 24 and say just because it's probable and not a hundred  
 25 percent certain, I'm not going to use this as a

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1 learning tool, correct?

2 A Correct.

3 MR. ALLEN: Objection, argumentative.

4 Q You looked at it and said there's some interesting

5 information and information that I didn't know about

6 that may explain a potential cause for this tragedy,

7 correct?

8 A Repeat, please.

9 Q Sure. When you looked through this, there were some

10 things that you hadn't been made aware of before;

11 isn't that right?

12 A Yes.

13 Q One of them had to do with the smart pigging that had,

14 in fact, been done before this occurrence in the two

15 years before?

16 A Yes.

17 Q And it was in the '96 and '97 smart pigging runs that,

18 in fact, had detected a defect that Olympic never

19 inspected? You learned that, didn't you?

20 A Yes.

21 Q And you learned that the DOE actually requested that

22 Olympic inspect it and they still never got around to

23 inspecting it, right?

24 MR. ALLEN: Object to the form of the

25 question. Misstates the point.

1 the line that Olympic simply isn't inspecting?

2 MR. ALLEN: Object to the form of the

3 question.

4 A Yes.

5 Q What did you do about it?

6 A I expressed my concern that that may be the case.

7 Q To whom?

8 A To my supervisor.

9 Q Who is that?

10 A Ron Brentson.

11 Q What did you say to him?

12 A Just -- I don't know. I can't tell you exactly.

13 Q Give me generally what you said to him.

14 A You know, do you know -- actually, I'm not absolutely

15 sure it was to Ron. It may have been to my fellow

16 controllers. You know, I cannot tell you specifically

17 who it was to.

18 Q I mean it would be natural for the fellow controllers,

19 once the OPS issued their violations, to talk,

20 correct?

21 A Yes.

22 Q You did, in fact, talk about these things, right?

23 A We did.

24 Q What were the concerns that were expressed about

25 Olympic's inspection of their defects?

1 Q The defect.

2 A I don't know.

3 Q That would give you some real concern if there's

4 defects that Olympic knows about in the line but

5 they're just not sending anyone out to inspect them or

6 repair them. That would give you concern, wouldn't

7 it?

8 MR. ALLEN: Object to the form of the

9 question. Misstates the record and argumentative.

10 A It's not my field of expertise.

11 Q You run this pipeline, don't you?

12 A I do.

13 Q And you need to run it safely, don't you?

14 A I do.

15 Q And the integrity of those pipes is a key component in

16 running it safely, isn't it?

17 A It is.

18 Q So if you learn there's something wrong with the

19 integrity of the pipe, that's something you would take

20 special attention of, wouldn't you?

21 A Yes.

22 Q Now, learning there were detections of possible

23 wrinkle bends, possible washes and defects in the line

24 that went uninspected by Olympic, didn't that give you

25 some concern as to whether there's other defects in

1 A The concern, really there was no real large amount of

2 concern because we felt confident they were doing

3 their job well. I don't know why this one was missed.

4 I don't know.

5 Q And what exactly gives you the confidence they're

6 doing their job well?

7 A Just because we have people of high integrity that do

8 good work.

9 Q These people of the high integrity that do good work,

10 the same people who missed this even after being

11 requested to do so by the DOE before ours that is

12 still doing it after our occurrence?

13 MR. ALLEN: Object to the form of the

14 question. Compound, argumentative and misstates the

15 record.

16 A I don't know.

17 Q Do you know if there's been any change in the people

18 who are doing the inspections of the defects from

19 before and after the June 10th, 1999, catastrophe?

20 A Yes.

21 Q What?

22 A I believe some, one or some of the individuals have

23 retired.

24 Q Who is that?

25 A Steve Reiksmith. Another individual, Richard Klassen,

1 who was primarily heading that up has left Olympic and  
 2 gone to work for Equilon, and now currently a  
 3 gentleman by the name of Kurt Hishita is heading up  
 4 the smart tool program.

5 Q So is it the fact that Kurt now has taken over the  
 6 program that gives you the confidence that this isn't  
 7 going to be repeated again; namely, that the defects  
 8 that were found and asked to be inspected by DOE are  
 9 actually going to be inspected now?

10 A I've always had confidence that, you know, they were  
 11 doing their job.

12 Q Must have shook your confidence though once you see  
 13 this and find out they didn't do their job, right?

14 MR. ALLEN: Object to the form of the  
 15 question. Argumentative.

16 A Somewhat.

17 Q Wasn't it more than somewhat?

18 A Somewhat.

19 Q Did you go talk to Klassen or did you go talk to the  
 20 other fellow and find out why didn't they do their  
 21 job?

22 A No.

23 MR. ALLEN: Object to the form of the  
 24 question.

25 Q Did you do anything to figure out what's actually

1 question.

2 A I don't recall. Can I see a copy?

3 Q Sure. You can look at mine. I'm looking at item No.  
 4 4. I think everybody probably has a copy of the  
 5 probable violations issued by the OPS.

6 A Okay.

7 Q You were aware of that, weren't you?

8 MR. ALLEN: Objection. What's the question  
 9 for the witness?

10 A Via this document.

11 Q Via that document you were aware of it, weren't you?

12 A By reading this I became aware of it.

13 Q Not just today. You were aware of it back when it was  
 14 posted in the control room, weren't you?

15 A Right.

16 Q So at that point in time you knew that the operators  
 17 in the control room continued to operate the pumps for  
 18 another 15 minutes, weren't you?

19 MR. VERWOLF: Objection. Assumes the  
 20 correctness of the document. No foundation for the  
 21 witness.

22 MR. ALLEN: Objection. No foundation.

23 Q Go ahead.

24 A I don't know. Would you -- I missed your question.  
 25 Would you say it again, please, David?

1 being done to make sure that the people are doing  
 2 their job to inspect the pipeline for the defects?

3 A No.

4 Q What concerns were expressed by the controllers as to  
 5 the fact that the inspectors didn't do their job in  
 6 '97 right in the area where this rupture occurred?

7 A I don't know.

8 Q But you were there, right?

9 A I know my concerns.

10 Q Tell us your concerns.

11 A Just were there any others missed.

12 Q What answers did you get?

13 A I did not, you know, I personally did not pro -- I did  
 14 not follow up on that, you know, in a -- you know, I  
 15 did not follow up on that.

16 Q You learned, also, that the Olympic personnel  
 17 continued to operate the pumps at the Cherry Point and  
 18 Ferndale Stations for 15 minutes after the line had  
 19 been shut down, originally shut down?

20 A On repressure?

21 Q On June 10th, 1999, after the line had been shut down,  
 22 you learned that Olympic personnel continued to  
 23 operate the pumps at Cherry Point and Ferndale  
 24 Stations for another 15 minutes, correct?

25 MR. ALLEN: Object to the form of the

1 Q Yeah. Was the entire report of the "Notice of  
 2 Probable Violation and Proposed Civil Penalty" by the  
 3 Office of Pipeline Safety posted in the control room?

4 A I am not sure. I would assume so.

5 Q Let me give you the whole thing here and let you look  
 6 at it. That's my copy of it.

7 (Pause in the proceedings.)

8 A As far as I can tell, it was all there.

9 Q One of the items was the fact that the controllers  
 10 continued to operate the pipeline, look at item No. 4,  
 11 continued to operate the pipeline for another 15  
 12 minutes after it was abnormally shut down, correct?

13 A I don't know.

14 Q That's what it says there, doesn't it?

15 A Yes.

16 Q So what did you do to determine whether that was  
 17 correct or incorrect?

18 A What did I do?

19 Q Yes, what did you do?

20 A I don't, I don't follow you.

21 Q You read this, correct?

22 A Yeah.

23 Q And that raised concerns to you as to whether the  
 24 operators and controllers were doing their job right,  
 25 correct?

1 A Okay.

2 Q It did, didn't it?

3 A No.

4 Q This did not raise a concern to you, if this is true,  
5 that the operators were doing their job right?

6 A Well, I don't know the status of the pipeline when  
7 that occurred. I don't know the actual status of the  
8 pipeline when that event occurred. Was it full? Was  
9 it empty? You know, I don't know. I can't answer  
10 that.

11 Q What did you do to find this out, to see whether or  
12 not the people that you have such confidence in to run  
13 the pipeline safely really can do their job or not?

14 MR. VERWOLF: Objection, argumentative.

15 MR. ALLEN: Join the objection.

16 A That's not my place. That's my supervisor's place to  
17 do that.

18 Q I don't care whose place it is. You, when you're  
19 running this pipeline, have to know that it's being  
20 run safely, correct?

21 A Correct.

22 Q You've got to rely not just on yourself but on people  
23 you work with, correct?

24 MR. ALLEN: Objection, argumentative.

25 A Repeat, please.

1 A No.

2 Q You don't? You don't think they would have a concern  
3 whether the operators know what they're doing just  
4 like the OPS had a concern whether the operators know  
5 what they're doing?

6 MR. ALLEN: Objection, argumentative and  
7 compound.

8 A I believe there, yeah, there should be some concern.

9 Q I mean, Mr. Tieken, for goodness sakes, even the BP  
10 officials, who have taken over this pipeline, at a  
11 press conference said they have concerns about the  
12 individuals who were in the control room that day.  
13 Even they said they had concerns, right?

14 MR. VERWOLF: Is that a question?

15 MR. ALLEN: Objection to the question if  
16 there is one.

17 MR. SPAAN: Speech.

18 Q Correct?

19 MR. ALLEN: It's argumentative.

20 A I don't know how their concerns relate to the  
21 individuals, in what respect.

22 Q You would agree with -- you know who Larry Peck is?

23 A I've met him once.

24 Q BP official involved in the management of the pipeline  
25 now, correct?

1 Q You've got to know that not only you're doing it  
2 right, but the people you're working with know how to  
3 do it right, correct?

4 A Yes.

5 Q And not only for when you're on shift do you need to  
6 know it's being operated safely, but you want to know  
7 it's being operated safely when you're not on shift as  
8 well, don't you?

9 MR. ALLEN: Objection, argumentative.

10 A Yes.

11 Q You can understand the parents that I represent who  
12 have lost their boys, that they want to know this  
13 pipeline is being operated safely no matter if Lloyd  
14 Tieken is involved there or if anyone else is involved  
15 there? You can understand that, can't you?

16 A Yes.

17 Q And you can understand that when they see something  
18 like this, that, in fact, operators making deliberate  
19 decisions to turn the pumps on to keep them operating  
20 after it's been shut down, that might raise some real  
21 concerns in their mind as to how well these operators  
22 are running that pipeline, correct? You can  
23 understand that, correct?

24 MR. ALLEN: Objection. No foundation and  
25 argumentative.

1 A Yes.

2 Q Would you agree with him that, quote, "The fact that  
3 the pipeline was restarted, I don't think you can say  
4 anything but that that was a mistake," end of quote.  
5 You would agree with that, wouldn't you?

6 A No.

7 Q Why not?

8 A Because I wasn't operating the pipeline.

9 Q So you don't know whether or not the people that were  
10 operating the pipeline made a mistake or not, do you?

11 A Yes.

12 Q And you don't know whether the people operating the  
13 pipeline are still capable of making the same mistakes  
14 that led to three people getting killed or not, do  
15 you?

16 MR. ALLEN: Objection, argumentative.

17 A Repeat.

18 Q You don't know, as we sit here today, that the people  
19 that are operating the pipeline besides yourself are  
20 still capable of making the same, the same mistake  
21 that led to three people getting killed, do you?

22 MR. ALLEN: Objection. Misstates the  
23 witness' testimony.

24 A I don't.

25 Q You're a concerned parent yourself, aren't you?

- 1 A Of course.
- 2 Q What have you done to ensure that the pipeline is now  
3 being operated by controllers who actually know what  
4 to do in an emergency situation who aren't going to  
5 run pumps for 15 minutes after it's been abnormally  
6 shut down?
- 7 MR. ALLEN: Objection. No foundation and  
8 argumentative.
- 9 MR. FINEGOLD: Compound question.
- 10 A Specifically?
- 11 Q Yeah.
- 12 A I have confidence in my co-workers that they know what  
13 they're doing.
- 14 Q Same co-workers that BP officials said that they have  
15 concerns about, same ones that were in the control  
16 room, correct?
- 17 MR. ALLEN: Object to the form of the  
18 question. Misstates the record.
- 19 Q I'm sorry. Okay, let me do it this way: Why don't  
20 you go ahead and read, this is a newspaper article.  
21 Why don't you read into the record, why don't you read  
22 in there as to what was said.
- 23 A "We also have concerns about the individuals that were  
24 in the control room that day."
- 25 Q And that's being said by whom?

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(LLOYD TIEKEN - BY MR. BENINGER)

- 1 MR. VERWOLF: Objection.
- 2 MR. ALLEN: Objection. Vague and  
3 argumentative.
- 4 A I don't know.
- 5 Q How about the quote that you see from Larry Peck,  
6 that's the other fellow, the official there, that  
7 talks about being a mistake that was made in  
8 restarting the pipeline? Do you agree with that?
- 9 MR. ALLEN: Object to the form of the  
10 question.
- 11 A I don't.
- 12 Q If these people have concerns about the controllers on  
13 duty and also believe that a mistake was made, do you  
14 have any evidence to rebut that?
- 15 A I don't.
- 16 Q One of the other things that was brought up by the  
17 Office of Pipeline Safety was all the problems they  
18 had at the Bayview Station. You're aware of that,  
19 correct?
- 20 A Yes.
- 21 Q Were you aware of this before or after the OPS came  
22 out?
- 23 MR. ALLEN: Object to the form of the  
24 question. Vague.
- 25 A More specifically?

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- 1 A Talley said. He said, "Olympic had reassigned  
2 supervisor Ron Brentson, a defendant in wrongful death  
3 lawsuits filed by parents of the two boys killed."
- 4 Q Talley is who?
- 5 A Bobby Talley is the on site, I believe he's the  
6 manager of the facility, the top dog next to the  
7 president.
- 8 Q And so he's quoted as saying that he has concerns  
9 about the people in the control room that day, meaning  
10 June 10th, 1999, correct?
- 11 A I don't know that.
- 12 Q That's what he's being quoted as saying, isn't he?
- 13 A He's saying that, yes, but I don't know what concerns  
14 he has, how his concerns relate.
- 15 Q How about this --
- 16 A He might be concerned that, you know, they're having  
17 mental problems. I don't know what he's concerned  
18 about.
- 19 Q Do you think maybe the preceding paragraph helps  
20 clarify that where it talks about that Bobby Talley  
21 acknowledged public concerns about those in the  
22 Control Center on the day of the accident. That those  
23 concerns are dealing with their fitness to perform  
24 their job, not just concerns of stress after the  
25 accident, but their fitness to perform their job?

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(LLOYD TIEKEN - BY MR. BENINGER)

- 1 Q Sure. The problems out at Bayview with the valves,  
2 were you aware of it before or after OPS came out and  
3 documented this?
- 4 A Which valves?
- 5 Q Which valves were causing problems out there?
- 6 A I don't know specifically which valve was considered,  
7 is considered to be causing a problem.
- 8 Q Do you know that there was more than one valve out  
9 there causing problems at Bayview?
- 10 A No.
- 11 Q You do now from the OPS report, don't you?
- 12 MR. ALLEN: Objection, argumentative.
- 13 A No.
- 14 Q You didn't read in the OPS report that RV 1919 has  
15 closed uncommanded over 50 times?
- 16 MR. VERWOLF: Objection. Assumes the  
17 accuracy of the report.
- 18 A No.
- 19 Q You did read that part of the report though, right?
- 20 A I scanned it. I didn't read it specifically. Would  
21 you like me to read it right now?
- 22 Q Why would you only scan it? There's never been  
23 something as big as this in the whole history of the  
24 Olympic Pipe Line where three people have died,  
25 correct?

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1 MR. ALLEN: Objection, argumentative.  
 2 Q Correct?  
 3 A Yes.  
 4 Q And you got nothing from the company to explain why  
 5 the accident happened, correct?  
 6 A Yes.  
 7 Q This is really the first piece of an investigation and  
 8 conclusions into what occurred that you're given, this  
 9 report from the OPS, right?  
 10 MR. ALLEN: Objection, argumentative.  
 11 A Yes.  
 12 Q So are you telling me you just scanned it and then  
 13 went about business as usual?  
 14 MR. ALLEN: Objection, argumentative,  
 15 compound.  
 16 A Yes.  
 17 Q Are you seriously telling me that you didn't spend a  
 18 considerable amount of time reading through this  
 19 document from page to page to figure out how you could  
 20 run this pipeline safely and not kill more people?  
 21 MR. VERWOLF: Objection, argumentative.  
 22 MR. ALLEN: Join the objection.  
 23 A Yes.  
 24 Q You didn't do that?  
 25 A No.

1 training that you'd gone through?  
 2 A No.  
 3 Q You paid more attention to the other training than you  
 4 did to the OPS findings as to this tragedy?  
 5 MR. ALLEN: Objection to the  
 6 characterization.  
 7 A Yes.  
 8 Q Why?  
 9 A Well, I, I guess they -- they seemed more -- they just  
 10 seemed more relevant, I guess.  
 11 Q Good God, sir, can you think of anything more relevant  
 12 than the explanation as to why three people died in  
 13 the operations of your pipeline?  
 14 MR. ALLEN: Objection. Object to the form  
 15 of the question. Argumentative.  
 16 A Un, no.  
 17 Q But somehow talking about hydraulics at a one day  
 18 seminar by Frank Hopf seemed like it was more relevant  
 19 as to whether this pipeline is safe to operate or not?  
 20 MR. ALLEN: Object to the form of the  
 21 question. It's argumentative.  
 22 A Is that a question?  
 23 Q Yes, it is. I'll have her repeat it if you'd like.  
 24 A Please.  
 25 (The question was read back.)

1 MR. ALLEN: Objection, argumentative.  
 2 Q How long do you think you took reading through this,  
 3 the first glimpse you have into why three people died  
 4 from the operations of your pipeline?  
 5 MR. ALLEN: Objection, argumentative.  
 6 Q How long did you take?  
 7 A I don't know.  
 8 Q Two minutes?  
 9 A I read through the document.  
 10 Q 30 seconds?  
 11 MR. ALLEN: Same objection.  
 12 MR. MARTIN: Asked and answered.  
 13 A I read through the document.  
 14 Q I want to know how long you took to read through this.  
 15 A Five minutes.  
 16 Q So 12 pages, five minutes to read through it and you  
 17 say you really only skimmed through parts of it or did  
 18 you actually read every sentence on every page?  
 19 A I don't recall.  
 20 Q Was there a company meeting on this to go through it  
 21 and talk about what has been revealed so far so people  
 22 can use it as a learning tool?  
 23 A No.  
 24 Q On skimming through this, is this kind of the same way  
 25 you use this as a learning tool like the other

1 A I don't want to judge relevance one to another.  
 2 Q You just did for us.  
 3 MR. ALLEN: Objection.  
 4 Q So I need to know whether you actually thought it was  
 5 more beneficial for you, in determining whether the  
 6 pipeline is a safe pipeline, the one day seminar you  
 7 went through with Frank Hopf or the findings from the  
 8 OPS as to the problems that esd existing.  
 9 A I don't know how to answer that.  
 10 Q Just truthfully.  
 11 A I don't know how.  
 12 Q When you read through this on Bayview, did you do  
 13 anything to try to figure out, look, have these valves  
 14 been fixed, has this problem been addressed?  
 15 A We have not used Bayview since. I don't know.  
 16 Q Bayview has to get used in some respect. I mean the  
 17 line runs right through Bayview, doesn't it?  
 18 A No.  
 19 Q So the whole line of product can be circumvented  
 20 around Bayview without going through Bayview at all?  
 21 A Yes.  
 22 Q The line doesn't go through and have a pressure dip  
 23 and then a pressure that requires it be repressurized  
 24 once it goes through Bayview?  
 25 A No.

- 1 Q And since June 10th, 1999, both lines have been  
2 circumvented around Bayview, the 16 and the 20 inch?  
3 A Bypass has been put in place, yes.  
4 Q And neither one of the lines was used through Bayview  
5 then ever since June 10th, 1999; is that right?  
6 A Yes.  
7 Q If Bayview was safe, why wouldn't they keep using it?  
8 A I don't know.  
9 Q No one told you anything?  
10 A No.  
11 Q Didn't you think that this report might be interesting  
12 to know why you're no longer using Bayview?  
13 A Yes.  
14 Q But you only scanned through it or did you actually  
15 read it?  
16 A I scanned through it. I didn't, you know, I didn't  
17 actually digest it. I'm not -- I don't really -- I  
18 didn't actually digest it. I scanned through it.  
19 Q I didn't say did you eat it or anything. I said did  
20 you read through this and you found it particularly  
21 interesting to know if this may be the reason why  
22 you're not using Bayview anymore, correct?  
23 MR. ALLEN: Object to the form.  
24 Argumentative.  
25 A No.

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(LLOYD TIEKEN - BY MR. BENINGER)

- 1 A And I don't know.  
2 Q But didn't you try to find out? You are interested in  
3 being able to make sure this pipeline can be run  
4 safely, correct?  
5 A Yes.  
6 Q So did you try to find out why did they go unnoticed  
7 at Bayview for so long?  
8 A It is my job to operate the pipeline. When I'm given  
9 something to use, it is my belief that it's been  
10 engineered and it's been given to me good to go.  
11 Q You don't ask any questions?  
12 A I do, yes.  
13 Q And when things get brought to your attention that  
14 things may not be good to go, you do something about  
15 it, don't you?  
16 A I do.  
17 Q Just like if a light was to come on in your car, you  
18 go and inspect why is the light on, what's the  
19 problem, correct?  
20 A Yes.  
21 Q If there was a ping or knocking in your car, you  
22 would do something about it, wouldn't you?  
23 A Yes.  
24 Q And if there's reports from people that your car is  
25 not running right when you're driving it and using it,

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- 1 Q Did you ask anyone, hey, why aren't we using Bayview  
2 anymore? Heck, that cost us 20 million bucks. Did  
3 you ask anyone that?  
4 A No.  
5 Q Just sort of shrugged your shoulders and said one less  
6 problem to deal with. I won't have to worry about  
7 Bayview anymore?  
8 A Just -- pretty much. Just, you know, that job's a big  
9 job, you know, so going on with business.  
10 Q Business as usual?  
11 MR. ALLEN: Object to the form of the  
12 question if it's a question.  
13 A Is that a question?  
14 Q Yes, just going on with business, just keep on going,  
15 correct?  
16 A Continuing to do my job.  
17 Q Your job relies on not only the other personnel but  
18 the equipment that you're using as well, correct?  
19 A Yes.  
20 Q And so this must have been particularly interesting to  
21 you that Bayview had some defects that the OPS cited  
22 Olympic for and that may also be, those defects, the  
23 reason why it's not even being used anymore, correct?  
24 MR. ALLEN: Objection to the form of the  
25 question. It's compound.

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(LLOYD TIEKEN - BY MR. BENINGER)

- 1 you would address that, wouldn't you?  
2 A Yes.  
3 Q Same thing with the pipeline, if there's problems that  
4 are being reported, investigated and determined by  
5 somebody, that's something that would be particularly  
6 interesting to whether your car really is good to go  
7 and safe or not, correct?  
8 A Yes.  
9 Q So what did you do then when you esd told your car,  
10 your pipeline here wasn't good to go, that there esd  
11 valves that esd a problem, that esd a problem some 50  
12 plus times?  
13 MR. VERWOLF: Objection. He stated that  
14 Bayview was not operating.  
15 Q Go ahead.  
16 MR. ALLEN: Objection to the form.  
17 A The document was from OPS.  
18 Q So?  
19 A I would like to see something from Olympic Pipe Line.  
20 Q We would, too. We really, really would, but you're  
21 not aware of any investigation that they're doing into  
22 why this occurred, are you?  
23 A It hasn't been made clear to me that they have or they  
24 are or aren't.  
25 Q In fact, you didn't do any investigation as to why

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1 this occurred, did you?  
 2 A No.  
 3 Q You're not aware of anything being done by the  
 4 controllers to try to figure out why this occurred,  
 5 are you?  
 6 MR. FINEGOLD: Asked and answered.  
 7 MR. ALLEN: Objection, asked and answered.  
 8 A No.  
 9 Q So right now, in fact, you don't even have anything  
 10 from Olympic to say what OPS has alleged here is  
 11 wrong, do you?  
 12 A No.  
 13 Q When they put this up in the bulletin board they  
 14 didn't say, hey, take this with a grain of salt, we  
 15 don't believe it; nah, this is not what our  
 16 investigation reveals; nah, this isn't what really  
 17 occurred. They didn't give you any of those kind of  
 18 disclaimers, did they?  
 19 A No, and may I see that document again?  
 20 Q Of course you can.  
 21 A I may have confused it with the other document or is  
 22 that --  
 23 Q The other 12 page document that came from OPS  
 24 detailing the fines and the reason why they believed  
 25 that Olympic was in violation? You confused those

1 A It appears to be the same document.  
 2 Q Again, you've never seen anything from Olympic to  
 3 respond or rebut any of the allegations made from the  
 4 OPS, have you?  
 5 A No.  
 6 Q And you haven't talked to any of the controllers who  
 7 say that some of the things in here are wrong,  
 8 correct?  
 9 A Correct.  
 10 Q Did you actually get a copy yourself of this document?  
 11 Did the Olympic personnel give you a copy yourself to  
 12 take home?  
 13 A No.  
 14 Q Why not?  
 15 MR. VERWOLF: Objection, speculation.  
 16 MR. ALLEN: Join the objection.  
 17 A I don't know.  
 18 Q Do they normally give you documents that you could  
 19 take home to, I guess, what did you call them, a  
 20 learning tool? Did they normally give you learning  
 21 tools to be able to take home and learn from?  
 22 A If I chose to make a copy of the document provided I  
 23 could have, I'm sure.  
 24 Q You'd have to take it down from the board and do that;  
 25 is that right?

1 ones?  
 2 A Yeah.  
 3 Q Why don't you look through it again and see if that  
 4 is, in fact, what Olympic posted or if they posted  
 5 something else.  
 6 Q Why don't we do this. Why don't we take a quick break  
 7 while you read through that. I know you did it once  
 8 on the record, the video, and said that looked like  
 9 what was there, but why don't you read through that  
 10 again and see if, in fact, that's what you saw that  
 11 was posted.  
 12 MR. DAHL: Going off the record. The time  
 13 is approximately 2:28 p.m.  
 14 (Recess taken at 2:28 p.m.)  
 15 MR. DAHL: Back on the record. The time is  
 16 approximately 2:42 p.m.  
 17 BY MR. BENINGER:  
 18 Q Mr. Tieken, have you had a chance to look through the  
 19 12 page document entitled "Notice of Probable  
 20 Violation and Proposed Civil Penalty" directed to  
 21 Mr. Gass from Chris Woodell from the Office of  
 22 Pipeline Safety?  
 23 A Yes.  
 24 Q Is that the document which was posted on the bulletin  
 25 board or whatever it was in the control room?

1 A No, it was on the desk.  
 2 Q Is there a place where they post these sort of things,  
 3 the various fines they may get and leaks and  
 4 investigation reports, anyplace they post that?  
 5 MR. ALLEN: Objection to the question. No  
 6 foundation.  
 7 A Yeah, I don't know.  
 8 Q There's no, I guess what do they call it, an accident  
 9 prevention program where they have bulletin boards  
 10 that are set up in the workplace there for employees  
 11 to be able to go to to see about different accidents  
 12 and investigations that have taken place?  
 13 A No.  
 14 Q And there's probably also then not a weekly safety  
 15 meeting that you all take part in?  
 16 A There is.  
 17 Q There is, okay, and the minutes from those meetings  
 18 are posted where?  
 19 A I believe on the Intranet.  
 20 Q And has OSHA come out and cited you all for not having  
 21 a bulletin board and cited you with the accident  
 22 prevention policies within OSHA and WISHA?  
 23 A Not that I'm aware of.  
 24 Q The minutes of the safety meeting, esd those given out  
 25 to the various individuals or just simply posted on



- 1 the Intranet?
- 2 A I believe they're posted on the Intranet, which is
- 3 available for everyone, and we do have a process
- 4 called "near miss reviews", which there are whenever
- 5 there are near miss incident reviews, and they're, the
- 6 results of those are published.
- 7 Q What is that?
- 8 A In the event of, you know, something that might be
- 9 considered a safety or operational hazard is
- 10 experienced, the individuals involved are brought
- 11 before a number of supervisors and a process is
- 12 reviewed.
- 13 Q So that was probably done here then, right?
- 14 A It hasn't yet.
- 15 Q Hmm, do you know what they're waiting for?
- 16 A I don't. Just that it's a very complex issue.
- 17 Q Yeah, but they've dealt with complex issues before
- 18 though, right?
- 19 MR. ALLEN: Object to the form of the
- 20 question.
- 21 A I don't know.
- 22 Q You think that that's a reasonable excuse not to do,
- 23 what did you call that, near miss?
- 24 A Near miss.
- 25 Q The fact that this wasn't a near miss but an actual

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(LLOYD TIEKEN - BY MR. BENINGER)

- 1 A The Grand Jury testimony was recorded.
- 2 Q Have you seen any transcript of that?
- 3 A And I believe that the U.S. attorneys, our meetings
- 4 esd recorded, yes. There wasn't a stenographer but
- 5 they took notes.
- 6 Q Other than -- have you seen those notes?
- 7 A No.
- 8 Q Any other statements that you've ever seen that you've
- 9 given relating to this other than what you've produced
- 10 here today?
- 11 A No.
- 12 Q Let me go back through and the one statement, which
- 13 we've marked as Exhibit 221, this talks about what you
- 14 did in the SCADA room, correct?
- 15 A I believe -- yes.
- 16 Q And one of the things that we had was that we had
- 17 OLY 1 or, excuse me, OLY 2 was the primary at the time
- 18 that the problems started to occur, correct?
- 19 A Yes.
- 20 Q That slowed down and then locked up on you, didn't it?
- 21 A Yes.
- 22 Q When it starts to slow down, are there priorities in
- 23 the system that get processed? Is there any sort of
- 24 internal priority as to what gets processed if there's
- 25 a slowdown?

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- 1 hit where three people died, do you think that
- 2 justifies not doing this review panel?
- 3 MR. ALLEN: Objection, argumentative.
- 4 A No.
- 5 Q The fact that the reason why it occurred may be
- 6 complex, do you think that justifies not getting
- 7 started to do an investigation?
- 8 A They may be.
- 9 Q You haven't been called before any board though, have
- 10 you?
- 11 A Not at work.
- 12 Q And you're not aware of any other controller who's
- 13 been called before any board from Olympic on this
- 14 investigation, correct?
- 15 A Yes.
- 16 Q Yes, that's correct, you're not aware of any person;
- 17 is that right?
- 18 A Yes.
- 19 Q Now, did you give statements to anybody else? Have
- 20 you given a statement to anybody?
- 21 A What kind of statement specifically?
- 22 Q Any kind of statement. Any recorded statement,
- 23 handwritten statements, any kind of statement?
- 24 A I've spoken with the U.S. Attorney's Office.
- 25 Q Did they record that in any document?

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(LLOYD TIEKEN - BY MR. BENINGER)

- 1 A It can decide its own prioritization.
- 2 Q Do you know what that is?
- 3 A No.
- 4 Q When you did the switchover to OLY 1, OLY 1 started to
- 5 have problems then, too, didn't it?
- 6 A OLY 1 never came on line successfully.
- 7 Q You said that, "It only appeared to be partially
- 8 successful with OLY 1 performing sluggishly and
- 9 unresponsive." That led me to believe that it
- 10 actually came on line, it just wasn't doing a very
- 11 good job, but you're saying it didn't even come on
- 12 line?
- 13 A Yeah, as far as I'm concerned, it did not come on
- 14 line.
- 15 Q So this would be about 3:30, 3:35, correct?
- 16 A Yeah, 3:35 plus.
- 17 Q So at 3:35ish we have both computers down?
- 18 A Effectively, yes.
- 19 Q And what are you supposed to do in a procedure like
- 20 that when you have both computers down?
- 21 A Get one of them working.
- 22 Q Well, you had problems with the one. You had problems
- 23 with the other, so you now have two computers down.
- 24 What are you supposed to do?
- 25 A Get one of them working.

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1 Q Are you supposed to notify your Control Center  
 2 supervisor as well?  
 3 A I had tried to do that already.  
 4 Q Are you also supposed to institute abnormal  
 5 procedures?  
 6 MR. ALLEN: Object to the form of the  
 7 question. Vague.  
 8 Q I mean --  
 9 A Am I?  
 10 Q Yes. I don't know if it's vague or not. That's what  
 11 it's entitled, "Abnormal Procedures" of the Operations  
 12 Manual for Controllers, right?  
 13 A Okay.  
 14 Q There's a whole training you go through to deal with  
 15 abnormal procedures, right?  
 16 A Okay.  
 17 Q Is that correct?  
 18 A May I read it?  
 19 Q Of course you can, and you've seen the one that I've  
 20 tagged there which is 5.7. One of the abnormal  
 21 procedures is when both computers go down.  
 22 MR. FINEGOLD: Is that 5.7?  
 23 MR. BENINGER: 5.7, yes, sir.  
 24 A Okay.  
 25 Q Now, did 5.7 tell you something that you didn't

1 believed that, if there was any control. I don't  
 2 think at that point in time that -- I don't believe  
 3 that was established.  
 4 Q Let me see if I understand --  
 5 A That both esd down completely.  
 6 Q You have OLY 2 that you had to shut down because it  
 7 had locked up on you?  
 8 A Correct.  
 9 Q You switched over to the only back-up you had which  
 10 was OLY 1 and that never really came on line. It was  
 11 unresponsive, sluggish and didn't come on line,  
 12 correct?  
 13 A It was on line.  
 14 Q I thought you just said earlier it never came on line?  
 15 A Well, poor choice of words. It was on and as far as,  
 16 you know, whether it was fully functional or not, that  
 17 was, you know, that would be an issue.  
 18 Q We know it wasn't fully functional?  
 19 A Correct.  
 20 Q We know it was functional --  
 21 A Correct.  
 22 Q Dysfunctional?  
 23 A It was dysfunctional.  
 24 Q Dysfunctional to the point that it was failing?  
 25 A It was not doing its job properly.

1 already know and esd trained in?  
 2 A No.  
 3 Q So esd you aware that under the abnormal procedures  
 4 protocol, that if both computers go down, that you esd  
 5 supposed to institute the abnormal procedures  
 6 protocol, right?  
 7 A Yes.  
 8 Q And that includes notifying your supervisor, correct?  
 9 A Yes.  
 10 Q And shutting down the pipeline?  
 11 A That part wasn't up to me because I wasn't running the  
 12 pipeline.  
 13 Q Who was it up to to shut down the pipeline once you  
 14 had Control Center computer failure?  
 15 A Well, it would be up to the controller on duty.  
 16 Q Who was that?  
 17 A In this case it would be Kevin Dyvig.  
 18 Q Did you notify him then that both computers esd down  
 19 approximately 3:35ish?  
 20 A I don't recall.  
 21 Q You should have done that though, right?  
 22 A I -- well, I may -- had I believed they esd, you know,  
 23 my statement of two never coming up after the fact was  
 24 that -- was, was now. Then, I don't know if I had  
 25 that, if I believed that at that point in time, if I

1 Q It was failing, unresponsive, going to lock up like  
 2 OLY 2?  
 3 A Well, I don't know that.  
 4 Q Did you keep it operating or did you turn it off?  
 5 A No, I shut it off.  
 6 Q And the only reason you shut it off is if it was going  
 7 to fail on you, right?  
 8 A Well, that's -- no.  
 9 Q So now at this point in time, 3:35ish, you've got OLY  
 10 2 shut down and failed on you, locked up, and you've  
 11 got OLY 1 needed to be shut down as well because it  
 12 wasn't going to perform correctly, right?  
 13 A Correct.  
 14 Q Both computers are down, correct?  
 15 A Well, 1 was not performing as well as it should have,  
 16 if at all. I was never able to establish that it was  
 17 completely broke.  
 18 Q So both computers esd down?  
 19 A Okay.  
 20 Q Correct?  
 21 A I can't say that absolutely.  
 22 Q Did you turn them both down or not?  
 23 A No.  
 24 Q Okay, you had OLY 2 down and you had OLY 1 which you  
 25 now say was actually on line but --

1 A It was primary.  
 2 Q It was primary but it just wasn't performing the  
 3 responses. It was unresponsive and sluggish?  
 4 A Correct.  
 5 Q Do you think that's a good computer?  
 6 A No.  
 7 Q That was a failed computer at that time to be able to  
 8 run that system?  
 9 A I had no idea when it might, it might clear up and be  
 10 healthy the very next second or not. I don't know  
 11 when it was going to get healthy.  
 12 Q You didn't give it that chance, did you?  
 13 A Sure. I left it on line until I rebooted 2.  
 14 Q And it never did work? The entire time you esd trying  
 15 to reboot 2, it never did come back on line, did it,  
 16 to the point where it was functioning?  
 17 A Well, it never -- yeah, it never --  
 18 MR. FINEGOLD: He hadn't finished his  
 19 answer.  
 20 MR. ALLEN: Let the witness finish his  
 21 answer.  
 22 A It never became fully stable, no.  
 23 Q So you've got two computers, one that's down and one  
 24 that never becomes fully stable about 3:35ish,  
 25 correct?

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(LLOYD TIEKEN - BY MR. BENINGER)

1 you know, completely without control.  
 2 Q What would it have taken for you to determine that you  
 3 esd completely out of control?  
 4 A Both machines halted, black screens up front.  
 5 Q So as long as one was sort of chugging along, never  
 6 coming on line, not being responsive, that, you think,  
 7 is going to be okay?  
 8 A At any point in time, you know, it may have. I don't  
 9 know.  
 10 Q How long would that situation have had to go on before  
 11 you finally throw in the towel and say, hey, I've got  
 12 to do something here. I've got to step up and take  
 13 steps to prevent release and to prevent problems?  
 14 A No longer than it did.  
 15 Q What did you do then? I missed that. Did you tell  
 16 Dyvig, hey, look, there's a problem here. I don't  
 17 know how reliable the system is?  
 18 MR. ALLEN: Objection, asked and answered.  
 19 Q I think you answered it just as far as both computers  
 20 down, but I want to know did you raise any concern  
 21 that you had with the fact that both computers esd  
 22 malfunctioning?  
 23 A No.  
 24 Q Why not?  
 25 A Because I was busy trying to get -- I didn't have a

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1 A Correct.  
 2 Q And at that point in time did you, in fact, tell Kevin  
 3 Dyvig that you've got a problem with the computers.  
 4 You don't know how serious it is or how long it's  
 5 going to be, but you've got a problem with both  
 6 computers down?  
 7 A He was aware of it as an end user, but whether he was  
 8 aware that both computers esd, you know, that to  
 9 call -- I did not specifically tell Kevin that, yes,  
 10 both computers are down.  
 11 Q Kevin Dyvig should have been aware that both computers  
 12 esd unresponsive as the end user, correct, at 3:35ish?  
 13 A Yes.  
 14 Q At that point whose job is it to institute abnormal  
 15 procedures and shut down the line?  
 16 A I believe it would be the, the controller.  
 17 Q Kevin Dyvig?  
 18 A Yes.  
 19 Q Why wouldn't you have that responsibility to do as  
 20 well?  
 21 A Because I was working in the computer room.  
 22 Q But why wouldn't you have the responsibility to notify  
 23 him just like every operator has a responsibility to  
 24 prevent any problems?  
 25 A Just -- I never really felt that we esd completely,

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(LLOYD TIEKEN - BY MR. BENINGER)

1 chance. I was busy trying to get one of them  
 2 functioning and that required immediate attention,  
 3 hands-on there at the terminal to get it done.  
 4 Q What would it have taken you to notify him?  
 5 A I would have -- well, I would have had to take the  
 6 time to walk in there and, you know, tell him  
 7 specifically, does he understand this.  
 8 Q You don't have any communication between the computer  
 9 room and the control room?  
 10 A There's a telephone, yes.  
 11 Q Oh. Is it a telephone that you just pick up and  
 12 you've already got a live line or you've got to dial  
 13 numbers?  
 14 A No, I've got to dial numbers.  
 15 Q So would it just simply have taken you the time to  
 16 pick up the phone, dial the numbers and for him to  
 17 pick it up, and say, hey, look, I've got a problem  
 18 here. I don't know how long it's going to be, but  
 19 I've got a problem here. Both computers are  
 20 malfunctioning?  
 21 A I believe he was aware that both computers esd  
 22 malfunctioning.  
 23 Q He should have been aware if he was doing his job,  
 24 correct?  
 25 A Whether he was aware that they esd fully down or not,

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1 if that was his trigger to start the abnormal thing  
 2 and definitely shut the system down. I don't know  
 3 what he was thinking.  
 4 Q Wait a minute. You act like there was some question  
 5 as to what the trigger is. You esd trained in  
 6 triggers as to what condition of the computers  
 7 triggers an abnormal condition, right?  
 8 A Yes.  
 9 Q So tell us, what was that training? What esd you  
 10 supposed to do?  
 11 A Can you restate the question, please?  
 12 Q Sure. Tell us what you esd supposed to do. What  
 13 trigger does it take for you to institute the abnormal  
 14 shutdown procedures for computer malfunctions?  
 15 A Upon knowledge that both computers are nonfunctional.  
 16 Q Nonfunctional?  
 17 A Yeah, or down, failed.  
 18 Q How about malfunctioned?  
 19 A How about it? I don't understand what you're asking.  
 20 Q What do they define as failed when you esd trained?  
 21 A I don't know if we went into a specific definition,  
 22 you know.  
 23 Q Well, to be trained adequately you'd have to consider  
 24 both the hairsplitting you're doing now, whether it's  
 25 failed vs. malfunctioned, right?

1 abnormal conditions and respond to abnormal  
 2 conditions, correct?  
 3 A Yes.  
 4 Q Okay, so here did you identify an abnormal condition  
 5 at approximately 3:35ish when both computers esd  
 6 malfunctioning?  
 7 A Yes.  
 8 Q What did you do to respond to the abnormal condition?  
 9 A Tried to get one of the computers functioning.  
 10 Q And did you assume that Mr. Dyvig would know that the  
 11 computers esd in an abnormal condition so that he  
 12 would take whatever steps esd appropriate to institute  
 13 the abnormal shutdowns?  
 14 A I did not prompt him. I -- yes.  
 15 Q And --  
 16 A I may have gone into the Control Center and told him  
 17 that, you know, 2 appears to be malfunctioning and not  
 18 working properly.  
 19 Q I don't know if -- counsel probably told you not to  
 20 speculate about stuff so don't say what you may have  
 21 done. Tell us what you did do. Did you actually go  
 22 in there and say, hey, look, 2 is down?  
 23 A I don't recall.  
 24 Q So you have an abnormal condition with the computers,  
 25 correct?

1 A I would think so, yes.  
 2 Q Tell me what was done to adequately train you so you  
 3 could recognize a potential abnormal condition with  
 4 the computers.  
 5 A Just the reading of the text.  
 6 Q And did you read that text to say if those computers  
 7 are just malfunctioning, you don't need to take steps  
 8 to institute the abnormal procedures, or only if  
 9 they're down, dead, can't be revived, I'm not going to  
 10 do it?  
 11 A I wasn't involved in that decision.  
 12 Q But you had to make the decision because you esd in  
 13 the computer room?  
 14 A The decision to say they esd dead?  
 15 Q The decision to institute abnormal procedures.  
 16 A I'm not sure. I'm not sure that that was my  
 17 responsibility.  
 18 Q It's every employee's responsibility that's working on  
 19 there, correct, if they know of an abnormal condition?  
 20 MR. ALLEN: Objection, argumentative.  
 21 Q Correct?  
 22 A Yes.  
 23 Q That's not argumentative. That's the facts. That's  
 24 what you esd trained, that it's every single  
 25 employee's responsibility to be able to identify

1 A Yes.  
 2 Q And you assume that Kevin Dyvig also recognizes that  
 3 this is an abnormal condition, correct?  
 4 A Yes.  
 5 Q And so you're expecting that the line is going to be  
 6 shut down?  
 7 A No.  
 8 Q In accordance with the abnormal conditions you didn't  
 9 expect the line to be shut down?  
 10 A I wasn't running the line.  
 11 Q I know. I know Kevin Dyvig was running the line,  
 12 right?  
 13 A Right.  
 14 Q You expected him to institute the abnormal procedures  
 15 to shut down the line based upon the abnormal computer  
 16 condition, correct?  
 17 A Correct.  
 18 Q So you expected the line to be shut down?  
 19 A I didn't -- I wasn't thinking about the line. I was  
 20 thinking about the computers.  
 21 Q What's more important, the line or the computers?  
 22 A In my role that day, it was the computers. I was  
 23 focused on the computers.  
 24 Q The computer only serves the line, doesn't it?  
 25 A In a sense.

1 Q The SCADA system is nothing more than a safety tool  
 2 for the safe operations of that line, correct?  
 3 A One of them.  
 4 Q And so the primary goal is to make sure that line is  
 5 run safely, correct?  
 6 A Yes.  
 7 Q So the maintenance of the SCADA system is secondary to  
 8 making sure that line is run safely, correct?  
 9 A Yes.  
 10 Q So esd you, in fact, understanding that when you had  
 11 an abnormal condition with the computers, that the  
 12 line was going to be shut down so that it could be  
 13 operated safely given the problem you esd  
 14 experiencing?  
 15 A Repeat that, please.  
 16 MR. BENINGER: Katie, would you read that  
 17 back?  
 18 (The question was read back.)  
 19 A No.  
 20 Q Why not?  
 21 A I was focused on the computers.  
 22 Q But you have to be able to think beyond the computers  
 23 because the computer is only one tool to serve the  
 24 ultimate responsibility of safety of the pipeline,  
 25 correct?

1 A I wasn't out front. I wasn't in the control room.  
 2 Q The trigger for the control room was the computer  
 3 failure, correct?  
 4 A Both computer failure.  
 5 Q That's right, and you esd taking care of both  
 6 computers' failures, weren't you?  
 7 A Yes.  
 8 Q And you expected the fact that both computers weren't  
 9 operating to be conveyed to Kevin Dyvig who was the  
 10 end user of that, correct?  
 11 A Yes.  
 12 Q So with him knowing that the computers are not  
 13 operating properly, he should have instituted abnormal  
 14 shutdown procedures, correct?  
 15 A Yes.  
 16 Q Okay. So when you institute an abnormal shutdown  
 17 procedure, when can you restart the line?  
 18 A Upon approval from your supervisor.  
 19 Q The supervisor on June 10th, 1999, would have been  
 20 who?  
 21 A Ron Brentson.  
 22 Q So you would expect, if the line was shut down as it  
 23 should have been for the computer malfunctions, that  
 24 Ron Brentson would have come to you first to find out  
 25 if it was safe to turn the line back on?

1 MR. ALLEN: Objection to the form of the  
 2 question. Argumentative.  
 3 A One would hope to get there.  
 4 Q So approximately what was it, about an hour later you  
 5 esd told that the line had been shut down?  
 6 A Approximately, yes.  
 7 Q And so that shouldn't have come as any surprise  
 8 because you know an hour earlier the line should have  
 9 been shut down, right?  
 10 MR. ALLEN: Objection, argumentative.  
 11 MR. SPAAN: Objection, argumentative.  
 12 A No.  
 13 Q No what?  
 14 A I didn't know that it should have. I didn't even -- I  
 15 didn't think about the operational side of things. I  
 16 had one thing on my mind, the computers.  
 17 Q You knew it should have been shut down though,  
 18 correct, if the operator was performing in accordance  
 19 with the Operation Manual for Controllers, correct?  
 20 A Provided it met that criteria, yes.  
 21 Q It did meet the criteria, didn't it?  
 22 A I don't know.  
 23 Q What do you mean you don't know?  
 24 MR. ALLEN: Objection, form of the question.  
 25 Argumentative.

1 A Ron Brentson was with me.  
 2 Q And did he ask you if it was safe to turn the line  
 3 back on?  
 4 A When the question was asked by Kevin if it was safe to  
 5 restart, I stated from the computer perspective, yes,  
 6 with Ron next to me.  
 7 Q When was that question raised?  
 8 A I want to say approximately 1605, 1600, 1605,  
 9 something like that.  
 10 Q So about 4:05 -- I guess I've got a little problem  
 11 because I thought you told me earlier the first time  
 12 you esd aware that the line was down was when he came  
 13 in about 1630, about 4:30, and said there had been a  
 14 leak with gas?  
 15 A Yeah, correct.  
 16 Q So really at 1605 though you knew the line was down  
 17 and you esd being asked whether it was safe to turn it  
 18 back on from a computer perspective, correct?  
 19 A At 1605, after the computers had been, you know,  
 20 gotten back functional and appeared to be stabilized  
 21 and healthy, at that point in time, you know, Kevin,  
 22 who was operating the pipeline system, you know, was  
 23 responsible for that piece.  
 24 Q I didn't ask you who was responsible. I just want to  
 25 make sure that we're now on the same page. By 1605

1 you know the pipeline is shut down, don't you?

2 A I do.

3 Q And you know that you have Ron Brentson coming in and

4 Kevin Dyvig asking from the computer perspective, is

5 it okay to turn the line back on, correct?

6 A Correct.

7 Q And you say from a computer perspective, yes, it's

8 okay to turn it back on, correct?

9 A Correct.

10 Q From an operator, a controller's perspective, what are

11 the steps that should have been followed before the

12 line was turned back on at 1605?

13 A Kevin would ask his supervisor for approval to

14 restart.

15 Q What would the supervisor do in order to give that

16 approval?

17 A I -- I don't know what he would do.

18 Q So the operator just simply turns it all over to the

19 supervisor to say you make the call. Tell me if it's

20 okay to turn the line back on, right?

21 A Correct.

22 Q And if the supervisor doesn't give the authority to

23 turn it back on, it shouldn't be turned back on,

24 correct?

25 A Correct.

1 MR. ALLEN: Object to the form of the

2 question.

3 A Repeat, please?

4 Q Sure. Did you have an understanding at 1605 that the

5 pipeline had been shut down because of the computer

6 problem?

7 A No.

8 Q Did you have any understanding as to why the pipeline

9 was down at 1605?

10 A No.

11 Q Was it your assumption it was simply down because of

12 the computer problem?

13 A To be honest with you, I wasn't thinking about the

14 pipeline.

15 Q Actually, that's what you had said earlier.

16 A I wasn't thinking about the pipeline.

17 Q At 3:30, 3:35 you weren't thinking about the pipeline

18 either, correct?

19 A Correct.

20 Q All the way up through 1605 you weren't thinking about

21 the pipeline, correct?

22 A Correct.

23 Q When did you first start thinking about the pipeline

24 again?

25 A When Kevin mentioned there was a report of gasoline in

1 Q And is the controller supposed to go through and check

2 to see why the line was shut down?

3 A Um, the controller should definitely know why his

4 pipeline was shut down.

5 Q And do you remember before 1605 if it was shut down

6 voluntarily, meaning Kevin Dyvig or someone instituted

7 the abnormal shutdown procedures and did it

8 themselves, or whether it automatically shut down?

9 A I don't know.

10 Q Do you know if there esd any other alarms that esd

11 going on at 1605 indicating possible problems with the

12 line?

13 A I did not.

14 Q Esd you part of any discussions in which that

15 occurred?

16 A I was not.

17 Q How did you solve the problem with the SCADA

18 computers?

19 A When OLY 2 was recycled and brought back primary, it

20 at that point in time came up healthy. The point in

21 time when it was recycled, just prior to it coming on

22 line, I had, I halted 01 so there wasn't the wild card

23 of the interaction between the two.

24 Q Did you understand that the computer was shut down at

25 1605 because of the computer problem?

1 Whatcom Creek.

2 Q That was about 4:30, correct?

3 A Yes.

4 Q Had you had any indication that there esd any alarms

5 or any other internal signals to notify somebody that

6 there had been a release?

7 MR. ALLEN: Objection, asked and answered.

8 A No.

9 Q How does that occur? How do the controllers in the

10 control room get notified that there may be a rupture

11 or leak in the line with product coming out of the

12 line?

13 A Pressure indications.

14 Q Go ahead, any other way?

15 A Leak detection system.

16 Q Any other ways?

17 A Overshots.

18 Q What's an overshoot?

19 A An overshoot is a manual comparison of barrels in vs.

20 barrels out done on a ledger.

21 Q Any other way you can think of? Pressure indicators,

22 leak detection system, overshoot?

23 A Flow rates.

24 Q Any other ways?

25 A No.

- 1 Q Now, does this require somebody to go look at these  
2 figures or is there some internal alarm that sounds or  
3 that lights up or that activates when there's a  
4 significant discrepancy in these things?  
5 A It may be both.  
6 Q How about with the leak detection system? How does  
7 one know that the leak detection system is signaling a  
8 leak?  
9 A It will generate an alert on the alarm event log.  
10 Q So you've got to go to the log? That's a separate  
11 screen, correct?  
12 A No, that's -- the alarm event summary is the summary  
13 log where the alarms cycle through identifying  
14 conditions to the controller. Alarm event. When an  
15 alarm comes across the board, it's logged in the event  
16 logger.  
17 Q And the event logger is where?  
18 A It's on the SCADA system.  
19 Q And it's a screen that you go to on the SCADA system,  
20 correct, like a program that you go through? Like if  
21 I'm looking at a Windows system, there would be  
22 another system you can go to to find out all the other  
23 alarm logs?  
24 A You can look at the event database. It's a log of  
25 events.

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(LLOYD TIEKEN - BY MR. BENINGER)

- 1 A Yes.  
2 Q The flashing text would be what color?  
3 A Red.  
4 Q Any other lights inside the control room that  
5 activate?  
6 A Along the bottom of each and every display there is a  
7 region that will allow the display of an indication  
8 that something is in alarm state for approximately six  
9 locations before that region is filled.  
10 Q You've got --  
11 A Five or six. On each screen there's a little line,  
12 one line of text along the very bottom that will say  
13 like OLY Station, if something at OLY Station is in  
14 alarm, and then at Tacoma Station and so on. That is  
15 another location, but once there's more than a certain  
16 amount, maybe five or six, the region is filled and  
17 you can see no more.  
18 MR. DAHL: Excuse me, counsel. We have four  
19 minutes before we switch tapes.  
20 MR. BENINGER: Why don't you go ahead and  
21 switch them.  
22 MR. DAHL: This is the end of tape No. 2 in  
23 the deposition of Lloyd Tieken. The time is  
24 approximately 3:17 p.m. Going off the record.  
25 (Recess taken at 3:17 p.m.)

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- 1 Q So am I understanding that the leak detection system  
2 activates, let's you know that thousands of gallons  
3 are rushing out of this system and the only way  
4 anybody knows about it in the control room is if they  
5 happen to go to the event log or if they happen to go  
6 to the alarm log?  
7 A No, the alarm log is always displayed 24 by 7, and it's  
8 right there, right there.  
9 Q Where is it right there?  
10 A Between the two controllers' work stations.  
11 Q So you have a separate monitor that displays nothing  
12 but the alarm log and never changes, correct?  
13 A Dedicated, yes.  
14 Q And that dedicated alarm monitor, how does it signal  
15 that there's an alarm that's going off? Are there  
16 flashing lights, colorization, sounds?  
17 A Flashing text message with audible indication.  
18 Q What's the audible?  
19 A A series of dings.  
20 Q Like could you describe it for us?  
21 A Well, back then it was a, it was more like a piercing  
22 horn, more like beep, beep, beep, beep, you know.  
23 Q Now what is it?  
24 A Now it's a ding, a PC based ding.  
25 Q Ding, ding, ding, ding?

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(LLOYD TIEKEN - BY MR. BENINGER)

- 1 MR. DAHL: Going back on the record. This  
2 is the beginning of tape No. 3 in the deposition of  
3 Lloyd Tieken. The time is approximately 3:26 p.m.  
4 BY MR. BENINGER:  
5 Q So the, whether the controller is designated on  
6 segment 1 or the mainline, they're going to have a  
7 screen that if the leak detection system is activated,  
8 on the bottom of the screen it will notify them that  
9 there's an alarm for that, correct?  
10 A Maybe, if that region is not filled up with other  
11 alarms, and to be honest with you, I'm not sure the  
12 PLDS does alert down below there or not.  
13 Q What's the PLDS? Is that the leak detection?  
14 A That's the leak detection, yes.  
15 Q You're using this day in and day out. You don't know  
16 if it activates on the screen? It activates but it  
17 alerts --  
18 A It's activates on the alarm summary but whether it  
19 actually displays down on that region, I can't say  
20 that I've actually looked there to say that it's down  
21 on that lower region or not.  
22 Q Maybe that brings up another question. After we have  
23 this occurrence that goes on and we have these things  
24 that are going on in the computer room and shut down  
25 the lines and start up the lines and things, has there

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1 been any training given to the controllers dealing  
 2 specifically with things in the manual such as  
 3 abnormal conditions, emergency conditions, those sort  
 4 of things?  
 5 A We are expected to read and understand what's in  
 6 there.  
 7 Q I know, and you esd expected to do that before June  
 8 10th as well, correct?  
 9 A Yes.  
 10 Q And that's part of the problem I have is whether the  
 11 people read them and if they did read them, whether  
 12 they understood them. My question to you though is  
 13 after June 10th, did the company go through some  
 14 specific training on the things that are in the  
 15 Operation Manual for Controllers? Did they go back  
 16 and train you on these things?  
 17 A No.  
 18 Q So you've, even up to today, you've had no additional  
 19 training on being able to identify and institute  
 20 abnormal procedures, correct?  
 21 A The CBT, the computer based training modules, covered  
 22 some of that as it pertains to the DOT regulations.  
 23 Q That's it, just to the DOT regs, right?  
 24 A Correct.  
 25 Q And was everyone required to go through the computer

1 monitor, I should say?  
 2 A Monitors.  
 3 Q How many monitors for each controller?  
 4 A Four for the mainline side and three for the segment 1  
 5 side.  
 6 Q Let me go through the mainline side then. For the  
 7 mainline side how many different screens can be shown  
 8 on the four monitors?  
 9 A One each.  
 10 Q So each screen then becomes dedicated or each monitor  
 11 becomes dedicated to a particular function, correct?  
 12 A Yes.  
 13 Q And those don't change then; is that right? By having  
 14 four monitors you don't need to change the screens?  
 15 A No, they do change.  
 16 Q Then let's look at the four monitors for the mainline.  
 17 Monitor No. 1, what different screens can be shown on  
 18 that?  
 19 A Any upwards of a thousand.  
 20 Q So you can change to at least a thousand different  
 21 screens that can be shown on monitor 1?  
 22 A On all of the monitors.  
 23 Q What does monitor 1, what is that used for? What is  
 24 that measuring or recording?  
 25 A Depends on the controller. Whatever he wants for his

1 based training module?  
 2 A Yes.  
 3 Q How long was that training?  
 4 A Approximately ten to 12 hours, something like that.  
 5 Q And that's something everybody went through?  
 6 A Yes.  
 7 Q How much of it was dedicated to abnormal procedures?  
 8 A I don't recall.  
 9 Q Five minutes, five hours?  
 10 A Oh, I would guesstimate very little, yeah.  
 11 Q Under five minutes?  
 12 A Maybe ten minutes at the most relative to the DOT  
 13 regulations.  
 14 Q And there would be no additional training that was  
 15 given to you relative to Olympic Pipe Line's manual  
 16 for abnormal procedures, correct?  
 17 A Correct.  
 18 Q And there was no additional training given to you  
 19 relative to Olympic Pipe Line's procedures for  
 20 emergency shutdowns, correct?  
 21 A Yes.  
 22 Q Now, help me understand the screens. We have one  
 23 monitor which is dedicated to the alarm log, correct?  
 24 A Correct.  
 25 Q Each of the controllers has their own screen or own

1 operating philosophy.  
 2 Q So the mainline would have four screens that can have  
 3 up to -- I'm sorry, four monitors that can have up to  
 4 a thousand different functions to be monitored,  
 5 correct?  
 6 A Over a thousand different displays are available to  
 7 any monitor, yes.  
 8 Q Do you have ones that when you're on the mainline that  
 9 you predominantly look at?  
 10 A Yes.  
 11 Q What are those?  
 12 A Start-up or summary displays. They're an overview of  
 13 the pipeline.  
 14 Q Is that on all four screens or on just one?  
 15 A One.  
 16 Q What about the other three monitors? What do you  
 17 primarily look at?  
 18 A Primarily segment displays and station displays.  
 19 Q Segment and station, define those. What are those?  
 20 A Segment would be, a segment display for segment 2  
 21 would be from Renton Station to Oly Station. Segment  
 22 3 would be from basically Castle Rock Station to  
 23 Portland.  
 24 Q The station that would be to the particular station  
 25 itself, correct?



- 1 A Correct.
- 2 Q On, let's say, monitor 3, what do you primarily have  
3 on there for mainline?
- 4 A I can't say I have primarily anything on a specific  
5 numbered monitor. The monitors, you know, it's too, I  
6 guess, vague.
- 7 Q You have four monitors. Are there four primary  
8 screens that you look at?
- 9 A Yes.
- 10 Q Start-up, the segment station, those are two. What  
11 about the other two?
- 12 A Okay, on which side? Okay, mainline or segment 1  
13 side?
- 14 Q I'm still stuck with mainline because that's the only  
15 one that's got four, right?
- 16 A Right.
- 17 Q When I'm talking three I'll talk three for segment 1,  
18 but let's stick with mainline now, okay?
- 19 A Okay. My preferred layout is start-up display on  
20 screen 4, which is the first screen you sit at. The  
21 next screen in line is segment 2, then segment 3, with  
22 the fourth screen being utility and seldom used for  
23 other than monitoring purposes.
- 24 Q On the bottom of each one of these monitors do you  
25 have the ability to have flashed to you that there's

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(LLOYD TIEKEN - BY MR. BENINGER)

- 1 that bottom line.
- 2 Q Even if there's four other alarms in, as long as  
3 there's not five or more it's going to show up on the  
4 bottom line, correct?
- 5 A Something like that. I'm not absolutely sure about  
6 the number but, yes.
- 7 Q Is there an audible alarm that's sounded?
- 8 A Yes.
- 9 Q And where is that? Is there a central place for the  
10 audible alarm or does each terminal have some speaker  
11 system?
- 12 A Each side has an alarming bell, basically a horn.
- 13 Q And then how about the dedicated alarm terminal? Does  
14 that have any audible alarm?
- 15 A No.
- 16 Q So you have, for your screen you're going to get a  
17 flashing light and you're also going to get an audible  
18 alarm, correct?
- 19 A A flashing location.
- 20 Q Location, okay. Is that flashing location also going  
21 to show up, even if it was on the mainline, going to  
22 show up on the segment 1 operator's screens?
- 23 A Yes.
- 24 Q And the audible alarm, is that going to come over the  
25 audible system that's on the segment 1 side?

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- 1 an alarm that's being sounded?
- 2 A Yes.
- 3 Q And are you able to set those so that you can have  
4 different alarms coming up on different screens?
- 5 A No.
- 6 Q The alarms that will show up at the bottom of the  
7 screens for each one of the monitors, is there  
8 something other than the leak detection signal?
- 9 A Yes.
- 10 Q What else? What other alarms show up there?
- 11 A They're not alarm specific. They're site specific.
- 12 Q So explain that.
- 13 A It will say Oly Station, Renton Station, Castle Rock  
14 Station.
- 15 Q How does the controller then figure out what the alarm  
16 is?
- 17 A He'll look and monitor the alarm summary listing and  
18 that tells him specifically which point is in alarm.
- 19 Q If an alarm goes off at, let's say you're on the  
20 mainline at the Oly Station, is it going to show up on  
21 the screen with flashing red?
- 22 A Which screen?
- 23 Q Any of the screens that you have on, any of the four  
24 monitors.
- 25 A If there are no other alarms in, it should show up on

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(LLOYD TIEKEN - BY MR. BENINGER)

- 1 A Yes.
- 2 Q So segment 1 is going to be able to have the same  
3 indications of an alarm as the mainline person,  
4 correct?
- 5 A Yes.
- 6 Q Is there a screen in the computer room as well?
- 7 A Yes.
- 8 Q And on that screen in the computer room, would that  
9 also have this minute reader, or whatever it is, at  
10 the bottom that would let you know if an alarm was  
11 going off?
- 12 A I'm not sure.
- 13 Q You've been there for months and months. You've  
14 looked at your screen, right?
- 15 A Yeah.
- 16 Q On your screen have you ever seen that little minute  
17 reader at the bottom where an alarm would show up?
- 18 A I can't say for sure yes or no.
- 19 Q You've never been trained as a controller that the  
20 screen in the computer room would have on the bottom,  
21 just like the other screens do, the indication of an  
22 alarm; is that right?
- 23 A No.
- 24 Q And in the computer room is there an audible --
- 25 A No, that is not right.

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1 Q Is there an audible alarm as well?  
 2 A There may be.  
 3 Q You don't know that?  
 4 A I've answered this before, I believe. There can be if  
 5 the proper screen is displayed, if the terminal is  
 6 turned on.  
 7 Q Wait a minute. You either have the physical hardware  
 8 there or you don't. Do you have the physical hardware  
 9 there to sound an audible alarm or not?  
 10 A Yes, it is there, but whether it is going to sound the  
 11 alarm or not is configurable.  
 12 Q Okay, and so you're saying the person in the control  
 13 room can override this little reader thing at the very  
 14 bottom of the screen that comes up no matter what  
 15 screen you have on?  
 16 MR. ALLEN: Are you speaking of the monitor  
 17 in the control room? It's confusing.  
 18 MR. FINEGOLD: You've been talking about the  
 19 other room.  
 20 MR. BENINGER: The computer room, not the  
 21 control room.  
 22 MR. FINEGOLD: You just said the control  
 23 room.  
 24 MR. BENINGER: I'm sorry. I'm in the  
 25 computer room right now.

1 Q Control Center.  
 2 A Yes.  
 3 Q And does that same little ticker tape of alarms show  
 4 up on the screen in the computer room?  
 5 A It may or may not.  
 6 Q Depending on?  
 7 A Depending on whether it -- I believe it does, but I am  
 8 not sure. It's a different display mechanism in the  
 9 computer room.  
 10 Q How many months have you spent in the computer room?  
 11 A A bunch.  
 12 Q How come you don't know whether or not on the screen  
 13 in the computer room the ticker tape of alarms is  
 14 there or not?  
 15 A Because when I'm in the computer room I'm working on  
 16 host terminals. I'm not working on, you know, or a  
 17 PIC building program. I'm not working with those  
 18 displays, so I'm not in there using those displays and  
 19 watching for alarms. I'm not there to do that. I'm  
 20 doing other things.  
 21 Q I understand you're not there to do it, but I want to  
 22 know whether you can do it if you wanted.  
 23 A I don't know.  
 24 Q And maybe I asked you this, but do you know whether  
 25 there's an audible speaker that will sound an alarm in

1 Q In my mind I'm in the computer room right now, and on  
 2 the screen I'd be looking on if I was the controller  
 3 assigned to the computer room, are you telling me I  
 4 can override the little reader message on the bottom  
 5 of that screen that shows the alarms?  
 6 MR. VERWOLF: Objection.  
 7 A No.  
 8 Q Have you ever been in the computer room when the alarm  
 9 had been activated?  
 10 A Yes.  
 11 Q And did you see it on the screen or not?  
 12 A I don't recall.  
 13 Q Then how did you know there was an alarm activated?  
 14 A If the proper display is displayed, the alarm listing  
 15 can be displayed. The alarm listing can be displayed  
 16 in the computer room.  
 17 Q So you can pull up that alarm listing just like at  
 18 that designated terminal in the control room, correct?  
 19 A Yes.  
 20 Q But in the control room you have, no matter which  
 21 screen you have up, you get this, I'm going to call it  
 22 a little reader message, the little ticker tape at the  
 23 bottom, that will alert the controller to an alarm in  
 24 a particular area, correct?  
 25 A And you're talking the Control Center?

1 the computer room?  
 2 A Yes.  
 3 Q And have you actually heard the alarm being sounded in  
 4 the computer room?  
 5 A Yes.  
 6 Q At that point you could go to the alarm log and figure  
 7 out what exactly is going on, correct?  
 8 A I could, yes.  
 9 Q And that alarm that would sound in the computer room  
 10 is for what type of alarms?  
 11 A The same as the Control Center.  
 12 Q Leak detection, pressure, overshoot, flow rates, all  
 13 those things, correct?  
 14 MR. FINEGOLD: Objection.  
 15 A Yes.  
 16 Q Let me go back to where we esd some questions back and  
 17 that was on June 10th, anywhere after 2:30 in the  
 18 afternoon, esd you aware of any alarms that esd  
 19 sounded?  
 20 A No.  
 21 Q You never heard or you just don't recall whether an  
 22 alarm was sounded at any time from 2:00 onward on June  
 23 10th?  
 24 A I never heard.  
 25 Q If an alarm had been sounded, you should have heard

1 that, correct?

2 A If the alarm was turned on, if the display was on, if

3 the computer was on, you know.

4 Q Any of those ones you should have heard it, correct?

5 A If.

6 Q If what? Go ahead.

7 A If the computer was on, if the bell was turned on, if

8 the proper display was on. I don't recall.

9 Q Is there a reason why that you turn off the bell in

10 the computer room?

11 A Yeah.

12 Q You do that?

13 A Yeah.

14 Q There must be a procedure as to when the bell should

15 be on or off in the computer room. What is that?

16 A There is not.

17 Q How do you override the bell in the computer room?

18 A I don't know.

19 Q You turn it off though?

20 A Yes.

21 Q How did you do that?

22 A I don't turn it off.

23 Q Who does?

24 A Primarily Todd does. It could be just a volume

25 setting.

1 Q Brentson wasn't there?

2 A Brentson was in the computer room.

3 Q Why was Brentson in the computer room?

4 A He had responded to his page.

5 Q Did you and Brentson ever figure out why the computer

6 was malfunctioning following your input of the

7 historical, I don't want to call it conduit but

8 historical, what did you call that again?

9 A Container.

10 Q Container. Did you ever figure out why it was

11 malfunctioning?

12 A No.

13 Q So you had both computers that malfunctioned and you

14 never figured out why there was a malfunction even

15 today?

16 A Correct.

17 Q Doesn't that cause you some concern that it could

18 happen again and the system could go down again?

19 MR. ALLEN: Object to the form of the

20 question. Vague.

21 A Some.

22 Q Not enough to do anything about it?

23 A No.

24 Q Actually, what would it take for you to do any sort of

25 investigation into the safety of this operation room?

1 Q Do you ever turn it on or off, the bell in the

2 computer room? Did you?

3 A It could be something just as simple as changing

4 displays, turning off that display. That will disable

5 the bell as well.

6 Q To turn off a display?

7 A Yeah.

8 Q Even -- I mean the bell comes through with that ticker

9 tape alarm too, doesn't it?

10 A No.

11 Q Why not?

12 A If the display is off, the display is off. There is

13 no display.

14 Q You mean the terminals --

15 A It's like a windowed display.

16 Q And you turn the whole thing off?

17 A Yeah, and you continue working with other windows,

18 other programs in the computer room. That's what we

19 do back there is we primarily do R&D on the computer

20 side of things.

21 Q So I'm going to have you walk me through from 1605,

22 which is when Dyvig and Brentson come to you asking if

23 it's okay to turn the pipeline back on respecting or

24 vis-a-vis the computer, and you say it is, correct?

25 A Dyvig came and asked us.

1 MR. ALLEN: Could I have the question read

2 back?

3 (The question was read back.)

4 MR. ALLEN: Object to the form of the

5 question.

6 A It would take, it would take the knowledge that it was

7 up to me specifically, you know, to take ownership of

8 a certain -- you know, if it fell under my

9 responsibility then I would, I would work on it.

10 Q Every controller's responsibility is to make sure the

11 pipeline is run safely, right?

12 A Yes.

13 Q So is there some more specific direction you would

14 need in order to investigate these things that we've

15 talked about, the computer going down, the abnormal

16 shutdowns as to whether people understood they esd

17 supposed to do something, the cause of the computer

18 going down, the cause of the Bayview problems, the

19 fact that people turned the computers or the system

20 back on?

21 A David, they're all specific fields of expertise. The

22 computers, the engineering side of facilities, I am not

23 expert. I'm not an engineer. I am not a computer

24 expert. I'm a pipeline controller.

25 Q How about within your field then of pipeline control.

1 Have you done any investigation as to why the manuals  
 2 esd ignored, why the procedures weren't followed  
 3 tightly? Should you have done anything on that within  
 4 your area of expertise?  
 5 MR. VERWOLF: Objection, argumentative.  
 6 MR. ALLEN: Objection, argumentative.  
 7 Q Go ahead.  
 8 A I have asked questions of my supervisor.  
 9 Q What esd you told? Your supervisor is Brentson?  
 10 A Yes.  
 11 Q What questions did you ask?  
 12 A Why aren't the manuals on the Intranet, for example.  
 13 Q What else?  
 14 A More current, maintained more currently.  
 15 Q What else?  
 16 A That's about it.  
 17 Q I mean you had ten hours of questions for some lawyer  
 18 that represents the company, right?  
 19 A In regards to this process, yes.  
 20 Q You probably had a lot less than ten hours of  
 21 questions just as to what's going to happen in a  
 22 deposition, right? It wasn't just generalities about  
 23 a deposition you questioned this lawyer for ten hours  
 24 for, did you?  
 25 A No.

1 A Oh, every couple of months.  
 2 Q So it's been, quote, "being worked on" for almost,  
 3 what, since --  
 4 A As long as I've been there.  
 5 Q Okay. So for the last six or so years it's being,  
 6 quote, "worked on", correct?  
 7 A Yes.  
 8 Q And do you know who's actually working on it?  
 9 A Yes.  
 10 Q Who?  
 11 A Sandy Conlin, Duane Whitlow, myself, Todd Smith, David  
 12 Justice.  
 13 Q You got five people?  
 14 A Ron Brentson.  
 15 Q Six people, Ron Brentson. If each of you even took  
 16 this manual and handwrote out each one of these pages,  
 17 it probably wouldn't take you six years to do an input  
 18 into the computer, would it?  
 19 A I wouldn't imagine that piece of the manual, no.  
 20 Q So are there other manuals that you're talking about  
 21 that you want to put on the Intranet?  
 22 A Yes, the Operations, Maintenance and Procedures  
 23 Manual.  
 24 Q Would that tell people how to handle abnormal and  
 25 emergency situations?

1 Q Because you saw a video they gave you about a  
 2 deposition that pretty much answered most of your  
 3 questions on that, right?  
 4 A Yes.  
 5 Q So you had about nine or so other hours that you  
 6 questioned this lawyer about stuff and you only asked  
 7 two questions of your supervisor about stuff related  
 8 to this case?  
 9 A More or less.  
 10 Q I mean this lawyer is a nice man but he doesn't know  
 11 diddly about operations of the pipeline, does he?  
 12 A I don't know what he knows.  
 13 Q So why would you question him for some ten hours and  
 14 not talk to your supervisor, who knows all about  
 15 pipelines, more than just two questions?  
 16 A There may have been more, David, you know.  
 17 Q What esd you told then on why there aren't manuals on  
 18 the Intranet?  
 19 A Well, basically it's they're being worked on.  
 20 Q The check's in the mail type thing?  
 21 MR. ALLEN: Object to the form of the  
 22 question. Argumentative.  
 23 MR. BENINGER: I'll withdraw that.  
 24 Q How long ago did you ask this question and get the  
 25 answer, quote, "It's being worked on"?

1 A Yes.  
 2 Q How far along are you on this project of getting these  
 3 manuals inputted on the Intranet?  
 4 A Oh, I, I would judge it would be 95 percent.  
 5 Q How many hours do you think you've been working on  
 6 this each week over the last six years?  
 7 A Me personally?  
 8 Q Yes. You are one of this team that you talked about.  
 9 A Oh, personally, maybe 60 at the most.  
 10 Q 60 hours?  
 11 A Yeah.  
 12 Q Does everything move this quickly at Olympic Pipe  
 13 Line?  
 14 MR. VERWOLF: Objection, argumentative.  
 15 MR. ALLEN: Join the objection.  
 16 A More specifically? Define "everything".  
 17 Q I mean these manuals esd set up to allow for safe  
 18 operations of the pipeline, correct?  
 19 A Yes.  
 20 Q The reason that you want them on the Intranet is to  
 21 provide another handy source for people in case they  
 22 have questions and concerns that come up, correct?  
 23 A Yes.  
 24 Q So this type of safety tool -- are all the safety  
 25 tools implemented with the same speed at Olympic Pipe

1 Line?  
 2 A I don't know.  
 3 MR. VERWOLF: Objection, argumentative.  
 4 Q What esd you told by Mr. Brentson as to why aren't  
 5 these manuals on the Intranet yet? What esd you told?  
 6 A It's in the works. It's being worked on.  
 7 Q And that was the last thing that you heard from him on  
 8 that?  
 9 A In process.  
 10 Q And your questioning you had was why not maintain the  
 11 manuals more current?  
 12 A Yes.  
 13 Q What esd you told on that?  
 14 A In process. Big job.  
 15 Q Big job just to make them current?  
 16 A Uh-huh.  
 17 Q Does that mean yes?  
 18 A Yes.  
 19 Q But it's also the manuals, to make them current,  
 20 that's an important safety tool, isn't it?  
 21 A Yes.  
 22 Q That's an important safety tool just like  
 23 investigating causes of near misses or actual hits or  
 24 other accidents is an important safety tool as well,  
 25 correct?

1 A When I've got a pipeline to run, you know, that's what  
 2 I do.  
 3 Q Isn't it good to be able to run that pipeline with  
 4 current, state of the art knowledge?  
 5 A It is.  
 6 Q And the only way everyone is going to be able to have  
 7 that current state of the art knowledge is that these  
 8 manuals get updated and the information shared?  
 9 A Yes.  
 10 Q Where is your manual?  
 11 A Currently, on the Intranet.  
 12 Q Yours is?  
 13 A Yes.  
 14 Q Do you have any physical manual?  
 15 A No.  
 16 Q Any updated manuals?  
 17 A Yes.  
 18 Q Where are those?  
 19 A Intranet.  
 20 Q How would I find it on the Intranet?  
 21 A Via the browser. You just click the file. Generally  
 22 it's marked "Home".  
 23 Q Home?  
 24 A Home.  
 25 Q Is that personal for you?

1 A Yes.  
 2 Q And maintaining these things more current isn't being  
 3 done any more than the investigation into this  
 4 explosion, correct?  
 5 A Repeat, please?  
 6 Q Sure. Making more current the manuals so that they're  
 7 available as a safety tool for controllers isn't being  
 8 worked on any more diligently than the investigation  
 9 into the causes by Olympic of this explosion?  
 10 MR. ALLEN: Objection, lack of foundation.  
 11 Q Is that right, from your knowledge?  
 12 A I don't follow you.  
 13 Q You're not aware --  
 14 A I don't follow the question.  
 15 Q You're not aware of anything that's being done to make  
 16 the manuals more current, are you?  
 17 A Yes.  
 18 Q What's being done on that?  
 19 A All employees are charged with reviewing the manual  
 20 and identifying anything that is not, you know, proper  
 21 in it, that is incorrect.  
 22 Q So you would have done that as well, gone through the  
 23 manual and done the same thing?  
 24 A Yes, as time allows.  
 25 Q What does that mean?

1 A That's pretty much companywide. Most people keep our  
 2 manual as their "home".  
 3 Q Is everybody responsible for updating, for making the  
 4 manual more current or is that assigned to any one  
 5 particular person?  
 6 MR. VERWOLF: Objection, no foundation.  
 7 A I don't know.  
 8 Q What happens if your computer goes down?  
 9 A There are numerous others.  
 10 Q You just go move yourself to some place that the  
 11 terminal is going to be working on?  
 12 A There are two, one for each controller, yes, and then  
 13 there are others as well.  
 14 Q And if your computer goes down, your computer is  
 15 linked into the mainframe computer, correct?  
 16 A Not correct.  
 17 Q How is the computer set up?  
 18 A Which computers?  
 19 Q You have your own stand-alone computer?  
 20 A Business machine is what we refer to it as, yes.  
 21 Q Your business machine?  
 22 A Yes.  
 23 Q What does that business machine do, your computing?  
 24 A It provides us access to Office documents, the Office  
 25 suites, the e-mail correspondence, the scheduling

1 software, you know, Outlook, Microsoft's management  
 2 tools.  
 3 Q Did you send any e-mails on why is there no  
 4 investigation or what's this whole business with the  
 5 OPS report or any of those kind of safety concerns?  
 6 A No.  
 7 Q Why not?  
 8 A A document from OPS is not, to me is not an official  
 9 document from my management stating that -- you know,  
 10 it is not from my management. It's to my management.  
 11 I don't expect that, you know, that to be to me --  
 12 maybe I misinterpreted it.  
 13 Q Who regulates your operations?  
 14 A DOT, OPS.  
 15 Q I'm sorry, you said who?  
 16 A OPS.  
 17 Q So the federal agency that would be responsible over  
 18 you to regulate all your activities is who?  
 19 A OPS.  
 20 Q And who was the one that wrote the probable violations  
 21 based upon their investigation of your company's  
 22 activities into this?  
 23 MR. VERWOLF: Object to characterization.  
 24 It's potential violations.  
 25 MR. BENINGER: No, no, probable. Probable

1 A Could you read, could you repeat the previous three  
 2 questions?  
 3 Q Sure.  
 4 (The questions esd read back.)  
 5 A As a controller, that's what I don't understand is you  
 6 asked me first that OPS governs all of my activities  
 7 as a controller, and I don't understand that to be  
 8 true.  
 9 Q If you do something as a controller, would OPS have  
 10 authority to come in and review that?  
 11 A I suppose.  
 12 Q Do they have authority to come on in and investigate  
 13 what you did as a controller?  
 14 A Yes.  
 15 Q Do they have authority to fine the company if you did  
 16 something in violation of their rules as a controller?  
 17 A Yes.  
 18 Q Is there any part of your job as a controller that OPS  
 19 wouldn't have the ability and authority over you?  
 20 A I'm not sure.  
 21 Q Are you aware of anything?  
 22 A I'm not sure. I am not.  
 23 Q You're not aware of it or you're not sure of it?  
 24 A I'm not aware of anything.  
 25 Q Let me zip you back to 1605 on June 10th. What do you

1 is the term.  
 2 Q So who is the one that wrote the probable violations  
 3 after their investigation into this incident?  
 4 A OPS.  
 5 Q The same governing body that regulates all of your  
 6 activities as a controller?  
 7 MR. ALLEN: Object to the form of the  
 8 question. No foundation.  
 9 Q Is that right?  
 10 A I don't know.  
 11 Q You don't know?  
 12 A Yeah.  
 13 Q Truly, you don't know that OPS regulates all the  
 14 activities of the pipeline operations?  
 15 MR. ALLEN: That's a different question,  
 16 counsel.  
 17 Q You're not serious on that, are you?  
 18 A Yes.  
 19 Q Yes, you really don't know that OPS regulates all the  
 20 pipeline activities?  
 21 A I know that.  
 22 Q Okay, then why did you say "no" earlier?  
 23 A It was a different question.  
 24 Q What was the question you said no to then? What part  
 25 of it?

1 do after you tell Brentson and Dyvig that from a  
 2 computer perspective it's okay to restart the line?  
 3 A I just responded yes, that the computers look healthy,  
 4 to Kevin.  
 5 Q Did you do anything else?  
 6 A No.  
 7 Q What happened after that?  
 8 A Kevin went back in and I believe, well, I -- well,  
 9 Kevin went back to the Control Center.  
 10 Q What did Ron do?  
 11 A He and I continued to have a conversation.  
 12 Q About what?  
 13 A Personal matters. I don't recall specifically.  
 14 Q It wasn't about the computer and it wasn't about what  
 15 was going on in the Control Center?  
 16 A We had discussed, had time to discuss a big portion of  
 17 that already. That was interspersed throughout the  
 18 conversation.  
 19 Q Maybe you'd better go back. Why don't you tell me as  
 20 much about the conversation you can remember of you  
 21 and Mr. Brentson.  
 22 A When Ron showed up --  
 23 Q What time was that, by the way?  
 24 A I want to say approximately 1645, maybe 1650.  
 25 Q Did he explain to you why it took so long for him to

1 respond to your call?  
 2 A No.  
 3 Q Was it unusual for him to take ten to 15 minutes to  
 4 respond to the call?  
 5 A No.  
 6 Q Go ahead.  
 7 A Upon arrival I outlined to the best of my recollection  
 8 what had transpired, just exactly what I wrote down on  
 9 221.  
 10 Q Yes, sir.  
 11 A The exception to that text is the deletion of the  
 12 historic containers which I had created, and we  
 13 discussed that prior to restarting, and that was it.  
 14 Q Any discussions on any other problems in the line  
 15 other than the computer problems you have just talked  
 16 about?  
 17 A No.  
 18 Q Kevin Dyvig comes in. How long is he there?  
 19 A Very briefly.  
 20 Q One minute?  
 21 A No. 30 seconds.  
 22 Q He leaves and then you and Mr. Brentson discuss what?  
 23 A We just, we have a conversation, personal in nature.  
 24 I don't recall with, you know, regards, you know, as I  
 25 thought of different things. Actually, that piques my

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(LLOYD TIEKEN - BY MR. BENINGER)

1 know, having a personal discussion and discussing, you  
 2 know, as questions arise in my mind about what may or  
 3 may not have happened.  
 4 Q And what, does he continue to stay in the computer  
 5 room then with you until Mr. Dyvig comes back in to  
 6 tell you about the gasoline spill?  
 7 A Yes.  
 8 Q So Brentson never does leave, from 1605, never does  
 9 leave and goes over to the control room before you  
 10 both are told that there's a gasoline leak; is that  
 11 right?  
 12 A Yes.  
 13 Q And you're talking during this half hour time period  
 14 or 25 minute time period about all personal things or  
 15 are you talking about computer and company related  
 16 stuff with Mr. Brentson or what?  
 17 A All of the above. I'm not sure.  
 18 Q Did you guys go on a break or take a break or anything  
 19 then?  
 20 A No.  
 21 Q Are you sitting or standing or what are you doing?  
 22 A Standing.  
 23 Q And you hear no other alarms that go off during this  
 24 time, correct?  
 25 A Correct.

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1 memory to -- I remember that I had also tried to  
 2 contact Todd Smith during this situation and he called  
 3 in and was able to modem in, I believe, and look at  
 4 the computers as well.  
 5 Q Did you talk to him before or after you got the OLY 2  
 6 back on line?  
 7 A After.  
 8 Q So you went from OLY 2 to OLY 1 back to OLY 2 and then  
 9 you talked to Todd Smith?  
 10 A Correct.  
 11 Q And he modemed on in and did what?  
 12 A And looked at the computers.  
 13 Q And what did he tell you?  
 14 A That they looked okay.  
 15 Q Was he able to figure out any reason why the  
 16 computers, both of them, malfunctioned?  
 17 A Not that I'm aware of.  
 18 Q And I think I probably asked you this, but even until  
 19 today you've never learned a reason as to why the  
 20 computers, both of them, malfunctioned; is that right?  
 21 A Yes.  
 22 Q Todd Smith calls in and then what?  
 23 A We have the discussion, finish with Todd, and then  
 24 Kevin walks in about 1605. Asked his question and  
 25 then goes out and Ron and I continue discussing, you

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(LLOYD TIEKEN - BY MR. BENINGER)

1 Q And the first notification that you have that there's  
 2 another problem with the line is when Mr. Dyvig comes  
 3 in; is that right?  
 4 A Yes.  
 5 Q And what does he say --  
 6 A What does Kevin --  
 7 Q -- specifically?  
 8 A What does Kevin say?  
 9 Q Yes, sir.  
 10 A Kevin comes out of the door of the Control Center as  
 11 we are exiting the computer room, meets us in the  
 12 hallway. He kind of holds the door open and says,  
 13 "I've had a report of a large volume of gasoline in  
 14 Whatcom Creek from Rick Kiene."  
 15 Q Did he seem to be in a hurry?  
 16 A Oh, yeah. He was rushing in there.  
 17 Q Who is Rick Kiene?  
 18 A Rick Kiene is a quality assurance person that came  
 19 from Arco Refinery.  
 20 Q Why is he up there, the Whatcom Creek area?  
 21 A I don't know.  
 22 Q And exactly what, he said that there's a large  
 23 volume -- ead you and Ron Brentson talking about next  
 24 week's meeting at Bayview during any of this portion?  
 25 A I don't recall.

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1 Q Where esd you and Lloyd or you and Mr. Brentson going  
 2 when you left the computer room and met up with Dyvig?  
 3 A Just easing our way out into, you know, out of the  
 4 computer room during conversation and, you know, on  
 5 our way into the Control Center.  
 6 Q Why are you going there?  
 7 A Coffee pot is in there.  
 8 Q So you esd going to take a little bit of a break?  
 9 A Sure.  
 10 Q Did you have your coffee cup with you that you esd  
 11 bringing?  
 12 A No.  
 13 Q So you esd going to go into the control room to get  
 14 some coffee and just sort of kibbitz in there?  
 15 A Yes.  
 16 Q And Ron then comes out and did he actually seem like  
 17 he was in a hurry or was he just informing you?  
 18 MR. ALLEN: You misspoke yourself.  
 19 Q I'm sorry, Kevin Dyvig comes out and did he seem to be  
 20 in a hurry?  
 21 A Yes, he was concerned.  
 22 Q What happened at that point? He says there's a  
 23 gasoline leak from a report by Rick Kiene and what's  
 24 the response?  
 25 A Okay, and we all went into the Control Center.

1 Q What do you do then besides just being two ears and  
 2 two eyes?  
 3 A I believe I attempted to build some trends, some  
 4 pressure trend displays to try to see how the pressure  
 5 looked, you know, to get some idea of what the  
 6 pressures esd doing at Cherry Point and Ferndale, as  
 7 well as Bayview.  
 8 Q Esd you trying to figure out whether there really was  
 9 a leak?  
 10 A Yes.  
 11 Q Or did you actually shut the line down and act as  
 12 though there was a leak?  
 13 A The line had already been shut down and we esd, and  
 14 Kevin was treating it as if there had been a leak.  
 15 Q And what does the manual tell you that you're supposed  
 16 to do if you get a report of a gasoline leak?  
 17 A Notify -- call 911 and notify the authorities.  
 18 Q Did you do that at 4:30 then?  
 19 A I did not.  
 20 Q Did you see anyone else that did that at 4:30?  
 21 A I did not.  
 22 Q Who was responsible for making sure that the things  
 23 that esd set out in the manual esd actually being  
 24 done?  
 25 A I believe it's a shared responsibility with the

1 Q And then what did you do?  
 2 A Just proceeded to -- it was shortly thereafter that,  
 3 you know, that the phone calls started coming in that  
 4 the creek actually caught fire and I started, you  
 5 know, logging events.  
 6 Q The creek doesn't catch fire until almost 5:00.  
 7 A Well, it's really, it's all quite blurry. It was a  
 8 long time ago, but basically that's what I remember is  
 9 that we started, you know, investigating -- actually,  
 10 I just kind of stood back and listened in. I can't  
 11 tell you exactly what I was doing, to be honest.  
 12 Q What was being done to investigate whether there was a  
 13 leak or not?  
 14 A I don't know.  
 15 Q You don't know or you don't remember?  
 16 A I don't know.  
 17 Q You esd there though, right?  
 18 A Yes.  
 19 Q And you weren't just being an observer. You esd going  
 20 to try to help out in this situation, correct?  
 21 A Yes.  
 22 Q This would be an emergency situation if there esd, in  
 23 fact, large volumes of gasoline from your pipeline  
 24 going into a creek, right?  
 25 A Yes.

1 controllers on duty and the Control Center supervisor.  
 2 Q You would have been one of those controllers on duty,  
 3 right?  
 4 A No, sir.  
 5 Q Because you esd on special assignment?  
 6 A Yes, sir.  
 7 Q And so you didn't feel that was your responsibility to  
 8 try to take up the slack when these people esd dealing  
 9 with an emergency and call 911?  
 10 A I did not know what had or had not been done. I was  
 11 dealing with the computers primarily.  
 12 Q Did you learn how long they had suspected there was a  
 13 leak?  
 14 A And there may be a problem with my time line. I'm not  
 15 absolutely sure I was in the Control Center between  
 16 the 16 -- I believe I was in there just shortly before  
 17 the, when Rick Kiene first called in, 1655. It may  
 18 not have been as early as 1635.  
 19 Q 1635 was when he called in a huge gasoline release,  
 20 correct? Let me show you --  
 21 A Yeah, that was copied off of Kevin's notes. I did not  
 22 take that.  
 23 Q 1635 up at the top was when he called in and Kevin's  
 24 notes have written down that it wasn't just a leak.  
 25 This was a huge gasoline release, correct? That's



1 what he reports?

2 A What Kevin said, that there was a large volume of

3 gasoline in Whatcom Creek.

4 Q I'm sorry, what did you write down?

5 A Huge gasoline release.

6 Q I'm sorry, go ahead and read the whole thing. "Rick

7 Kiene called" --

8 A "...in a huge gasoline release," and that's my terms.

9 That's my terminology.

10 Q Your terminology of trying to accurately depict what

11 was said and reported at 1635, correct?

12 A Actually, that's not true. I'm not sure as to -- like

13 I said, I copied Kevin's notes onto this paper. I'm

14 not sure where my logging actually occurred. I

15 believe it was later, like 1648.

16 Q Why was Kevin taking notes?

17 A He was -- we esd busy with the initial notification

18 and basically troubleshooting the situation.

19 Q If he's so busy why is he taking notes to document the

20 time lines and things?

21 A That's part of the job.

22 Q Is that part of the Emergency Log that you're supposed

23 to have?

24 A Yes.

25 Q Do you know what happened with that Emergency Log?

(LLOYD TIEMEN - BY MR. BENVINGER)

1 A No.

2 Q Did you see any alarms that esd going on?

3 A No.

4 Q So when you come on in and hear that there's a huge

5 gasoline release, there's nothing on any of the

6 monitors or anywhere in the control room letting you

7 know that there's an alarm or an alert about a

8 potential leak; right?

9 A No. I mean, yes, that is right. I wasn't running the

10 system.

11 Q Was the decision made to shut the system down at that

12 point in time immediately based upon Rick Kiene's

13 report?

14 A I don't know.

15 Q Did it continue to operate for a little while while

16 you esd in the control room before it was shut down?

17 A No.

18 Q Who then shut it down?

19 A Well, I don't know I should say. Not no. I don't

20 know.

21 Q Was it shut down though by the time you got into the

22 control room with Mr. Brentson?

23 A I, I believe as we went back into the control room,

24 here again, the time line is fuzzy, at some point in

25 time Kevin said that pressures didn't look right so he

1 A No.

2 Q So before you get in, he's already, Mr. Dyvig has

3 already written down that Mr. Kiene called and talked

4 about a huge gasoline leak, or release I should say?

5 A A huge volume of gasoline in Whatcom Creek, yes.

6 Q That's already been written down, correct?

7 A I guess, yes.

8 Q And then do you learn about it from him that there's

9 been a, Rick Kiene reported a huge gasoline release in

10 Whatcom Creek from his written entry or from him

11 verbally telling you?

12 A Verbally in the hallway when Ron Brentson and I esd

13 coming out of the computer room is when I heard it

14 from Kevin.

15 Q Let me back up. At the 1605 meeting did you have the

16 understanding that Ron Brentson gave the okay to try

17 to restart the pipeline at that point?

18 A Yes.

19 Q And did Mr. Dyvig tell you how many times that he

20 attempted to restart the pipeline and what conditions

21 he was faced with?

22 A No.

23 Q During the time that you esd in there there esd no

24 discussions as to here's what I've been doing and

25 here's the responses I've been getting?

(LLOYD TIEMEN - BY MR. BENVINGER)

1 had shut the line down and closed the block valves

2 prior to Rick Kiene's call.

3 Q So you think Kevin may have had some notification from

4 the system itself, from the SCADA system, that there

5 may be a problem even before Rick Kiene called in? Is

6 that what I'm hearing?

7 A Yes.

8 Q Do you know if the line was purged after a leak was

9 suspected?

10 A No.

11 Q You don't know or --

12 A I don't know.

13 Q Do you know if Mr. Dyvig shut the line down once he

14 suspected there may have been a release based upon the

15 readings he was seeing from the SCADA system or did he

16 wait until he had confirmation from Rick Kiene?

17 A I don't know.

18 Q Do you know why you weren't notified and Mr. Brentson

19 wasn't notified in the computer room when Mr. Dyvig

20 was having some concerns over the readings on the

21 SCADA system?

22 A Repeat, please?

23 Q Yes. Mr. Dyvig, you understood, had some concerns

24 over the readings on the SCADA system before Rick

25 Kiene called, correct?

1 A Yes. Well -- yes.

2 Q What's the procedure to be followed if there are

3 concerns raised on the readings on the SCADA system?

4 A To shut down and minimize any release as much as you

5 can with the equipment at hand.

6 Q Immediately or is there a delay in there or what's the

7 procedure?

8 A It depends on where the leak might be. If the leak

9 is, you know, upstream of a pump station with a big

10 hill and you can actually pump more by during the loss

11 of product, you are ultimately min -- attempting to

12 minimize the volume that eventually gets out. You

13 know, close it, block the nearest upstream block valve

14 and basically pump it until it's flat and there's no

15 pressure on the line. That's what flat means. That

16 would be one scenario.

17 Q The other scenario is to shut the system down

18 immediately?

19 A There's many scenarios, you know.

20 Q And is this just based on the controllers' on-the-spot

21 decisions as to what to do or are the scenarios

22 trained on and set forth in some manual?

23 MR. ALLEN: Objection, form of the question,

24 compound.

25 A Yes. The first question?

1 MR. ALLEN: Object to the form of the

2 question. It's confusing.

3 A It is confusing. Could you narrow it down, narrow the

4 question?

5 Q Sure. Am I really understanding that what you're

6 saying is that the controller has to make a judgment

7 call based not upon protocol and not upon industry

8 standards or anything else, but just based upon what

9 sort of experiences they've had in the past?

10 A Based upon all of that and the current profile of the

11 system he is running and the history of that system

12 from the beginning of his shift to that point in time.

13 Q With the six years you've been with Olympic, how many

14 times have you shut down the system for an abnormal or

15 emergency situation?

16 A Oh, maybe six at the most.

17 Q And, for instance, if one of the valves up in Bayview,

18 the 50 some times that they closed, unintentionally

19 closed, is that a situation, an abnormal situation in

20 which the pipeline should be shut down?

21 A I don't believe the valves closed unintentionally.

22 Q You did read the report from the OPS about the number

23 of times that the valves closed uncommanded up there

24 at Bayview, correct?

25 A Yes.

1 Q Answer any of them.

2 MR. ALLEN: Object to the form of the

3 question. Give the witness a question to answer.

4 A The first part of that last question, please?

5 Q Is the procedure set out in any manual or any

6 training?

7 A Yes.

8 Q So there's protocol that's set up to handle each

9 situation and it's just not left to the operator's

10 on-the-spot determination?

11 A Generic protocol.

12 Q Then how do the operators and controllers learn to do

13 the right things for each situation?

14 A It's a judgment call. A lot is a judgment call.

15 Q And do you get judgment by experience?

16 A By experience.

17 Q And do you get experience by bad judgment?

18 A And good judgment.

19 Q And so the way the system is set up is sort of the

20 good and the bad experiences, on-the-job training,

21 just sort of goes in and the operators have to kind

22 of, depending on how many bad experiences or good

23 experiences they have, make a judgment call as to what

24 they're going to do when faced with a potential

25 release?

1 Q And uncommanded means unintentional, doesn't it?

2 A No.

3 Q It means it intentionally closed from an operator's

4 intention and that's why it closed?

5 A The valves can close to protect. It was a safety

6 feature.

7 Q It can also close just because it malfunctions, right?

8 A Yes.

9 Q Now, the valve closed uncommanded up in the Bayview

10 area. Is that an abnormal situation that requires a

11 line to be shut down?

12 A It may be, yes. Yes.

13 Q May be or is that something you're trained for?

14 A Yes, it is, if it is closed unintentional.

15 Q Unintentional or uncommanded or do they really mean

16 the same thing to you?

17 A No.

18 Q So what's the difference then? If it's unintentional

19 and the valve closes, is that an abnormal situation

20 that requires immediate shutdown?

21 A I'm not sure how to answer that.

22 Q Just based upon your training. Have you been trained

23 that an unintended mainline valve closure is an

24 abnormal procedure that requires a shutdown?

25 A Yes.

- 1 Q If you have an uncommanded mainline valve closure, is  
2 that an abnormal procedure that requires a shutdown?  
3 A Yes.  
4 Q And you're not allowed to restart the line without  
5 doing an investigation and getting concurrence from  
6 your supervisor, correct?  
7 A Yes.  
8 Q Now, any of the 50 some times that the Bayview Station  
9 had an uncommanded or unintentional valve closure  
10 there, esd you on duty and had to shut down the line?  
11 A Yes.  
12 Q How many times?  
13 A I don't know specifically.  
14 Q More than one?  
15 A Oh, yes, yes. Maybe as many as ten. Maybe, maybe  
16 more.  
17 Q So maybe ten or more times you esd on duty when the  
18 Bayview valve created an abnormal procedure requiring  
19 you to shut down the line, correct?  
20 A The Bayview valve did not create an un -- did not fit  
21 the criteria.  
22 Q For what?  
23 A For unintended valve closure.  
24 Q Then why did you have to shut the line down?  
25 A Because Bayview isolated itself.

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(206) 622-6897

(LLOYD TIEKEN - BY MR. BENINGER)

- 1 question if it's a question. It's confusing.  
2 Q When the Bayview Station had the valve closures,  
3 uncommanded and unintended valve closure, did you shut  
4 down the pipeline or no?  
5 A Yes.  
6 Q So while you esd on duty that happened, what, ten plus  
7 times?  
8 A Yes.  
9 Q And the reason that it was shut down was why?  
10 A It --  
11 Q The line?  
12 A The line? Because I could no longer flow through the  
13 Bayview facility.  
14 Q I thought that you didn't have to flow through the  
15 Bayview facility.  
16 A At this point in time we did.  
17 Q So all up until the reroute occurred -- when did the  
18 reroute occur?  
19 A I don't know. I would guesstimate within the last six  
20 months, something like that.  
21 Q So before the reroute you had to go through the  
22 Bayview facility?  
23 A Yes.  
24 Q Both the north line coming down from Ferndale and the  
25 Anacortes line had to flow through the Bayview

KATIE MCCOY, RPR, CSR 08/30/00 Page 235 of 239  
(206) 622-6897

- 1 Q So when you had an unintended mainline valve closure  
2 at Bayview Station, under your policies and procedures  
3 you're required to shut down the line, correct?  
4 A The valves at Bayview are not mainline valves. They  
5 are receiver, incoming receiver valves and launcher  
6 valves.  
7 Q So if the valves at Bayview closed, you're saying that  
8 that isn't an abnormal procedure covered by the  
9 manual?  
10 A Correct.  
11 MR. ALLEN: Finally got there.  
12 Q And all the other operators and people should agree  
13 with that as well if you're properly trained?  
14 A Yes.  
15 Q Is it another malfunction?  
16 A No.  
17 MR. ALLEN: Object to the form of the  
18 question.  
19 Q It's not a valve that opens or closes. The failure of  
20 a valve to open or close when commanded is not another  
21 potential malfunction which is under 5.6 of your  
22 operating procedures as an abnormal condition  
23 requiring shutdown?  
24 A No.  
25 MR. ALLEN: Object to the form of the

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(206) 622-6897

(LLOYD TIEKEN - BY MR. BENINGER)

- 1 facility?  
2 A Yes.  
3 Q Bayview was an integral part of getting all the fuels  
4 from all four refineries, correct?  
5 A Yes.  
6 Q And did it require a physical reroute of the line  
7 around Bayview to be able to circumvent that?  
8 A Yes.  
9 Q And that was done approximately six months ago, is  
10 that right?  
11 A Yes.  
12 Q What esd you told as to why you circumvented the  
13 entire Bayview line or station?  
14 A I really wasn't told any specific reason.  
15 Q With the physical reroute of the line, had the  
16 decision been made then that Bayview was not going to  
17 be used anymore?  
18 A Oh, no.  
19 Q When has the decision been made that Bayview is not  
20 going to be used?  
21 A It's never been made.  
22 Q It's just not being used?  
23 A It is used occasionally.  
24 Q When?  
25 A Occasionally as scheduling requires.

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1 Q What scheduling would require you to use Bayview now?  
 2 A Just our standard scheduling.  
 3 Q If you've got a system set up so you physically bypass  
 4 Bayview, what scheduling requires you to go up and  
 5 reroute it through Bayview?  
 6 A We may not go entirely through it. We may deliver to  
 7 it. We may source out of it. It's a very flexible  
 8 facility.  
 9 Q Has it always been a very flexible facility?  
 10 A Yes.  
 11 MR. FINEGOLD: David, it's almost 4:30.  
 12 It's 4:29.  
 13 MR. BENINGER: We'll finish him off then  
 14 another time.  
 15 MR. WOLFE: I wonder if you want to just  
 16 finish Mr. Tiekem tomorrow?  
 17 MR. BENINGER: No, I'd like to get Burt.  
 18 I'd like to go through with Burt.  
 19 MR. ALLEN: We'll find another day.  
 20 MR. DAHL: This is the end of tape No. 3 in  
 21 the deposition of Lloyd Tiekem. The time is  
 22 approximately 4:30. Going off the record.  
 23 (The deposition of LLOYD TIEKEN  
 24 adjourned at 4:30 p.m.)  
 25

AFFIDAVIT

1  
 2 STATE OF WASHINGTON }  
 3 COUNTY OF KING } SS.  
 4  
 5  
 6 I have read my within deposition and the same is true  
 7 and accurate, save and except for changes and/or  
 8 corrections, if any, as indicated by me on the CORRECTIONS  
 9 sheet hereof.  
 10  
 11  
 12 \_\_\_\_\_  
 13 LLOYD TIEKEN  
 14  
 15 SUBSCRIBED AND SWORN to before me on this  
 16 \_\_\_\_\_ day of \_\_\_\_\_, 2000.  
 17  
 18  
 19 \_\_\_\_\_  
 20 Notary Public in and for  
 21 the State of Washington  
 22  
 23 My commission expires \_\_\_\_\_  
 24  
 25

CERTIFICATE

1  
 2  
 3 STATE OF WASHINGTON }  
 4 COUNTY OF KING } SS.  
 5  
 6 I, KATIE MCCOY, Certified Shorthand Reporter  
 7 licensed in the State of Washington, License No. 299-06  
 8 MC-CD-YK-ME21R3, and a Notary Public in and for the State of  
 9 Washington, do hereby certify that the foregoing proceeding  
 10 was reported by me and was thereafter transcribed under my  
 11 direction into typewriting; that the foregoing is a full,  
 12 complete and true record of said proceeding.  
 13 I further certify that I am not of counsel or  
 14 attorney for either or any of the parties in the foregoing  
 15 proceeding and caption named, or in any way interested in  
 16 the outcome of the cause named in said caption.  
 17 In witness whereof, I have hereunto set my hand  
 18 and affixed my seal this day.  
 19 Date: September 3, 2000  
 20  
 21  
 22 \_\_\_\_\_  
 23 Notary Public in and for  
 24 the State of Washington  
 25 My commission expires 6/13/02

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IN THE SUPERIOR COURT OF THE STATE OF WASHINGTON  
COUNTY OF WHATCOM

KATHERINE DALEN, individually and as  
the Personal Representative of the Estate of  
STEPHEN M. TSIORVAS, and as  
*Guardian ad Litem* for ANDREW R.  
TSIORVAS and GEORGE K. TSIORVAS;  
and KYRIACOS TSIORVAS,

Plaintiffs,

v.

OLYMPIC PIPE LINE COMPANY, a  
foreign corporation, EQUILON PIPELINE  
COMPANY LLC, a foreign corporation,  
EQUILON ENTERPRISES, LLC, a foreign  
corporation, and FRED CROGNALE,  
FRANK HOPF, RON BRENTSON  
and JOHN DOES,

Defendants.

OLYMPIC PIPE LINE COMPANY, a  
foreign corporation, EQUILON PIPELINE  
COMPANY LLC, a foreign limited liability  
company; and EQUILON ENTERPRISES  
LLC, a foreign limited liability company,

Third-Party Plaintiffs,

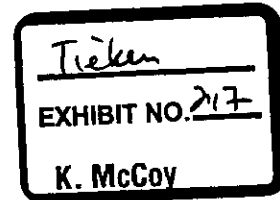
v.

IMCO GENERAL CONSTRUCTION CO.,  
a domestic corporation, and JOHN DOE  
DEFENDANTS ONE THROUGH FOUR,

Third-Party Defendants,

NO. 99-2-01468-1

**FIRST AMENDED**  
NOTICE OF VIDEOTAPED  
DEPOSITION OF LLOYD TIEKEN



LUVERA, BARNETT  
BRINDLEY, BENINGER & CUNNINGHAM  
ATTORNEYS AT LAW

6700 BANK OF AMERICA TOWER CENTER • 701 FIFTH AVENUE  
SEATTLE, WASHINGTON 98104  
(206) 467-6090

**FIRST AMENDED NOTICE OF VIDEOTAPE  
DEPOSITION OF LLOYD TIEKEN - 1**

1 FRANK S. KING, as the Personal )  
2 Representative of the Estate of WADE B. )  
3 KING, and FRANK S. KING and MARY )  
4 L. KING, individually, and TRACY K. )  
5 BELL, individually, and JASON KING, )  
6 individually, )

7 Plaintiffs, )

8 vs. )

9 OLYMPIC PIPE LINE COMPANY, a )  
10 foreign corporation, EQUILON PIPELINE )  
11 COMPANY LLC, a foreign corporation, )  
12 EQUILON ENTERPRISES, LLC, a foreign )  
13 corporation, and FRED CROGNALE, )  
14 FRANK HOPF, RON BRENTSON )  
15 and JOHN DOES, )

16 Defendants. )

17 OLYMPIC PIPE LINE COMPANY, a )  
18 foreign corporation, EQUILON PIPELINE )  
19 COMPANY LLC, a foreign limited liability )  
20 company; and EQUILON ENTERPRISES )  
21 LLC, a foreign limited liability company, )

22 Third-Party Plaintiffs, )

23 v. )

24 IMCO GENERAL CONSTRUCTION CO., )  
25 a domestic corporation, and JOHN DOE )  
26 DEFENDANTS ONE THROUGH FOUR, )

27 Third-Party Defendants, )

28 **TO: LLOYD TIEKEN**

29 **AND TO: MICHAEL G. MARTIN**

30 YOU AND EACH OF YOU, PLEASE TAKE NOTICE that pursuant to Rule 30 (a)(8)  
31 Washington Rules of Civil Procedure, the deposition upon oral examination of the following named  
32 to be recorded on videotape and by stenographic means, will be taken at the request of the Plaintiffs:

LUVERA, BARNETT  
BRINDLEY, BENINGER & CUNNINGHAM  
ATTORNEYS AT LAW

**FIRST AMENDED NOTICE OF VIDEOTAPE  
DEPOSITION OF LLOYD TIEKEN - 2**

U:\CATHY\olympic\depositions\tieken-2.dep

6700 BANK OF AMERICA TOWER CENTER • 701 FIFTH AVENUE  
SEATTLE, WASHINGTON 98104  
(206) 467-6090

NO. 99-2-01467-3

**FIRST AMENDED  
NOTICE OF VIDEOTAPE  
DEPOSITION OF LLOYD TIEKEN**

1 WITNESS: Lloyd Tieken  
2 DATE: Wednesday, August 30, 2000  
3 TIME: 9:30 a.m.  
4 PLACE: Luvera, Brindley, Beninger & Cunningham  
5 Bank of America Tower  
6 701 Fifth Avenue, Suite 6700  
7 Seattle, Washington 98104

8 The deposition upon oral examination is subject to continuance or adjournment from time to  
9 time or place to place until completed, and to be taken on the grounds and for the reason the said  
10 witness will give evidence material to the establishment of the plaintiffs' case, and is directed to bring  
11 items responsive to the attached Subpoena Duces Tecum pursuant to Washington Rule of Civil  
12 Procedure 30(b)(1).

13 DATED this 31<sup>st</sup> day of July, 2000.

14 LUVERA, BARNETT,  
15 BRINDLEY, BENINGER & CUNNINGHAM

16   
17 \_\_\_\_\_  
18 DAVID M. BENINGER, WSBA 18432  
19 PAUL N. LUVERA, WSBA 849  
20 Attorneys for Plaintiffs

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LUVERA, BARNETT  
BRINDLEY, BENINGER & CUNNINGHAM  
ATTORNEYS AT LAW

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DECLARATION OF MAILING

The undersigned certifies under penalty of perjury under the laws of the State of Washington, that on the below date, I mailed, or caused delivery of a true copy of the foregoing to:

Michael G. Martin  
Siderius Lonergan  
500 Union Street, Suite 847  
Seattle, WA 98101  
(Via Legal Messenger)

Mr. Laurence Finegold  
Attorney at Law  
1809 7<sup>th</sup> Avenue, Suite 1301  
Seattle, WA 98101

Mr. Michael R. Spaan  
Patton Boggs  
1031 West 4<sup>th</sup> Avenue, Suite 504  
Anchorage, AK 99501

Mr. Francis S. Floyd  
Floyd & Pflueger  
2505 Third Avenue, Suite 300  
Seattle, WA 98121-1445

Mr. Nick S. Verwolf  
Davis Wright Tremaine  
10500 NE 8<sup>th</sup> Street, Suite 1800  
Bellevue, WA 98004

Mr. Harry B. Platis  
Platis Law Firm  
4303 - 198<sup>th</sup> Street S.W.  
Lynnwood, WA 98036-6725

Mr. Richard F. Allen  
Mr. Chris Nicholl  
Cozen & O'Connor  
1201 Third Avenue, Suite 5200  
Seattle, WA 98101-3033

Mr. John W. Wolfe  
Attorney at Law  
701 Fifth Avenue, Suite 6110  
Seattle, WA 98104

Dated this 2<sup>nd</sup> day of August, at Seattle, Washington.

*Catherine Galfano*  
CATHERINE GALFANO

LUVERA, BARNETT  
BRINDLEY, BENINGER & CUNNINGHAM  
ATTORNEYS AT LAW



U.S. Department of Justice

United States Attorney  
Western District of Washington

Please reply to:  
Helen J. Brunner  
Assistant United States Attorney  
Direct Line: (206) 553-5172

601 Union Street, Suite 5100      Tel: (206) 553-7970  
Seattle, Washington 98101-3903      Fax: (206) 553-0755

April 20, 2000

**Hand Delivered**

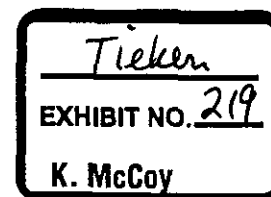
Mr. Richard C. Tallman  
Tallman and Severin LLP  
1011 Western Avenue, Suite 803  
Seattle, Washington 98104-1040

Re:    Compulsion Order for Lloyd Ticken

Dear Mr. Tallman:

On April 19, 2000, United States District Judge Robert S. Lasnik signed an order pursuant to Title 18, United States Code, Section 6002, compelling your client to provide testimony and other information in connection with an investigation of the Olympic Pipe Line Company. As a result, any statements or testimony given consistent with the order, and any information directly or indirectly obtained as a result of such statements or testimony, cannot be used against Mr. Ticken in either State or Federal Proceeding. The exception, of course, is a prosecution for perjury, giving false statements or contempt if Mr. Ticken if he provides something other than truthful statements and testimony.

Consistent with this order, it expected that Mr. Ticken participate in an interview immediately prior to his grand jury appearance. It is the government's understanding that Mr. Ticken is willing to go forward with this meeting solely because of the Compulsion Order entered by Judge Lasnik and the protections that this Order provides. Because any such statements will be made as a direct result of the Court's order, and therefore are compelled, like more formal testimony, such statements are



Richard C. Tallman  
April 20, 2000  
Page Two

subject to same protections against use in any subsequent proceeding and will be treated by the United States in that manner.

Sincerely,

KATRINA C. PFLAUMER  
United States Attorney

A handwritten signature in cursive script, appearing to read "Helen J. Brunner".

HELEN J. BRUNNER  
Assistant United States Attorney



U.S. Department of Justice

United States Attorney  
Western District of Washington

Please reply to:  
Lawrence Lincoln  
Assistant United States Attorney  
Direct Line: (206) 553-4127

601 Union Street, Suite 5100  
Seattle, Washington 98101

Tel: (206) 553-7970  
Fax: (206) 553-0755

August 29, 2000

**By Facsimile and Mail**

Mr. Michael Martin  
Siderius Lonergan & Martin  
500 Union Street, Suite 847  
Seattle, WA 98101

Re: Your client: Lloyd H. Tiekens, Jr.

Dear Mr. Martin:

I understand that the your client, Lloyd H. Tiekens, Jr., has been subpoenaed to give a deposition in a civil case arising from the Olympic pipeline rupture on June 10, 1999.

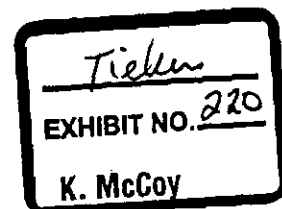
The United States Attorney's Office agrees that any statements made by your client during that deposition concerning the subject of the civil lawsuit will not be used against him, either directly or indirectly, in any criminal case brought by the United States Attorney's Office, with the exception of knowing false statements or perjury which may be used for any purpose.

Please feel free to contact me if you have any questions.

Sincerely,

KATRINA C. PFLAUMER  
United States Attorney

LAWRENCE LINCOLN  
Assistant United States Attorney





6-10-99 +/- 14:50 Created historic records for olympia station pump units 1 and 2. Procedure: On Vax workstation 2 I vertically tiled two terminal displays (OLY01top,OLY02bottom). In the top window(01secondary) I entered VDBCS and displayed a "Listing" of the historic record for motor vibration at olympia station (OLJHU2MVIB)to use as a template for data input.

In the lower window(primary02) I entered VDBCS and created the "historic" record skeleton. To complete the record I then copied the appropriate data from the window above and saved the record to the "real time" system.

(repeated the procedure for the second record) records created were OLJU1PVIB & OLJU2PVIB.

Checked the historic record listing on SCADA to ensure the records were resident and they were.

Checked the primary machines for error listings,...all OK.

Using the upper window (secondary02)I accessed the two associated records in the analog record section of VDBCS entered the appropriate data (yes to historical collection, associated record OLJHU\*PVIB).

Checked the primary machine for error listings,...all OK.

Checked the secondary machine for error listings,...all OK.

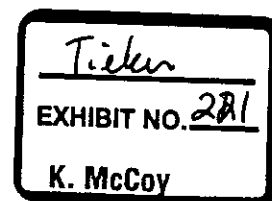
Checked SCADA for the ability to trend the new points, was unable to display a trend, I then realized a problem existed with the records

Checked the primary machine for error listings, errors showing now.

Back to VDBCS numerous times (3 or 4) scrutinizing the two newly created historical records and the two analog records. All data and data fields looked good. It was somewhere in this time frame reference that both mainframe systems bogged down and became unresponsive.

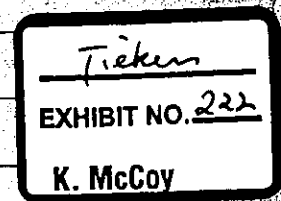
Speedy access to the primary machine via "console logger" to perform an orderly shutdown was not an option as the device was not responding. I then opted to Halt the primary OLY02 (immediately starting the reboot) and forced a over to OLY01. The failover to OLY01 only appeared to be partially successful with OLY01 performing sluggish and unresponsive.

I then brought OLY02 up as quickly as I could. As soon as an ONLINE status was displayed by OLY02 I halted OLY01 and OLY02 successfully started SCADA in the primary role.



7-10-99

- 16:38 FE S/D INITIAL NOTIFICATION
- 16:33 MP 16 & 7 Block Valves Closed
- 16:35 Rick Kiene called in Huge Gasoline Release <sup>Personnel called from</sup> 739-4126  
Near Iowa & Wadsw
- 16:40 Doug Beau notified
- 16:41 <sup>MP & S/D</sup> Fire Dept called & notified
- 16:54 Jeff Berry & Jim Trapholder to Allen for Boom
- 16:50 David Justice called in
- 16:57 Jim Cargo notified
- 17:00 David J. notified to close Block 27.7
- 17:05 Karen G. notified @ Home
- 16:50 Rick Kiene reports no fume @ Water Treatment Pl
- 16:53 Fire reported out Creek
- 17:10 Karen Greenl called in
- 17:10 Sam Perreau called in & notified
- 17:12 Jim Inley notified
- 17:12 Sam Gallant notified heading to Trenton
- 17:14 Pat Greenidge notified
- 17:15 Al White called in
- 17:15 Det Gregor called in
- 17:14 Rick Kiene standing by @ Yiding & Evening Star
- 17:14 Jeff & Darryl Trapholder headed down
- 17:16 Deanna Ryder Truck " "
- 17:19 Kwinn Wittmer 1 mile from site per Dave's
- 17:20 Jim Clow Crisis Mgmt Houston 713-937-3541
- 17:27 Sam Perreau called in & notified



1727 Holly W. called in (unavail)

1728 MARK K. called in

1729 Darrell R. called in

1731 PERRY @ Block Valve MD 27.7

1734 Block Valve @ 27.7 (closed) - Perry DALASA

1752 Whatcom Co. Emergency mang. John Gergett

1756 Kadel R. called in.

1803 Jeff B L/O Tagged out w/p 16 BV

1808 Sam Reneau logged in

1934 Ron Greenidge at Bellingham mixing with OPI Boat

6-11-98