

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

1 In the Matter of:

2 IE TMI INVESTIGATION INTERVIEW

3 of Mr. John Kevin Lionarons  
4 Auxiliary Operator Aid

5  
6  
7  
8  
9 Trailer #203  
NRC Investigation Site  
TMI Nuclear Power Plant  
10 Middletown, Pennsylvania

11  
12 May 24, 1979

(Date of Interview)

13 July 4, 1979

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21 NRC PERSONNEL:

22 Mr. Dorwin Hunter  
23 Mr. Mark E. Resner

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1        RESNER: The following is an interview of Mr. John Kevin Lionarons.  
2        Mr. Lionarons is employed at the Three Mile Island facility by Metropolitan  
3        Edison Company. His job title is Auxiliary Operator Aid. The present  
4        time is 11:22 a.m. eastern daylight time. Today's date is May 24,  
5        1979. The location of this interview is trailer 203; it's located  
6        just outside the south gate of the Three Mile Island facility. Individuals  
7        present representing the Nuclear Regulatory Commission at this interview  
8        are: Mr. Dorwin Hunter. Mr. Hunter is an Inspection Specialist. He  
9        is temporarily assigned to Region III with the U.S. Nuclear Regulatory  
10       Commission. Monitoring this interview is Mark E. Resner. I am an  
11       investigator with the Office of Inspector and Auditor, Headquarters,  
12       the U.S. Nuclear Regulatory Commission. Prior to tape this interview,  
13       Mr. Lionarons was given a two-page document which explained the purpose,  
14       scope and the authority which the Nuclear Regulatory Commission has  
15       been given by Congress to conduct this investigation. In addition, it  
16       apprised Mr. Lionarons, that he is entitled to a representative of his  
17       choice to be present during the interview if he should want one.  
18       Also, it apprised to him that in no way is he compelled to talk to us,  
19       if he does not want to. At this time I'll ask Mr. Lionarons if he  
20       would give us a brief resume of his educational and job experience as  
21       related to the job that he is now performing (and note for the record  
22       that when we refer to Mr. Lionarons, we'll be calling him Kevin). I  
23       assume that's what he prefers to be called. Mr. Lionarons.

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1 LIONARONS: My name is John Kevin Lionarons. I attended school through  
2 the 12th grade. Became employed by Metropolitan Edison in February  
3 '74 at the entry level utility B worker. I bid through the mode of  
4 progression into the UC&M department as an apprentice electrician. I  
5 was laid off in October 74 for approximately a year and a half. I  
6 came back at that time as a C operator, which I acquired by taking a  
7 written exam issued by Metropolitan Edison Company. And again, through  
8 the mode, I proceeded to go from an Auxiliary Operator C to B and then  
9 to an Auxiliary A Operator which I am now.

10  
11 RESNER: Alright. Thank you very much, Kevin. At this time, Mr. Hunter  
12 has some questions for you.

13  
14 HUNTER: Kevin, I would like to cover two areas and let's take the --  
15 the first area will be concerning surveillance procedure on the motor  
16 driven emergency feedwater system performed on the 26th of March 1979.  
17 And it's my understanding that you were involved in performing that  
18 surveillance procedure, is that correct?

19  
20 LIONARONS: That's correct.

21  
22 HUNTER: Okay. I would like to get you to take us through the surveil-  
23 lance procedure, if you will. Particularly indicating the procedure,  
24 the sheets that you were given the morning of the 26th, and if you can  
25 give us some times when you started the surveillance, when you finished

1 the surveillance, and then I'll try to ask some specific questions  
2 concerning this surveillance procedure. I have given Kevin to look at  
3 the procedure 2303 and 27 A and B with rad 4, which is the procedure  
4 which was performed on that day. Kevin you might indicate what the  
5 fore -- who gives you the procedure, the control room or the foreman,  
6 and sort of walk through it. In that manner, you'll be able to hopefully  
7 recall pretty close to exactly how you did the procedure that day.

8  
9 LIONARONS: Okay. I was notified by the on shift CRO that I was going  
10 to perform the surveillance on the motor driven feed pumps. Okay. At  
11 that time I come to the control room and I'm handed the procedure,  
12 which consisted of basically what I'm handed here, which is the entire  
13 procedure. At that time you get to look through the purpose and the  
14 frequency of the modes; the limits and cautions; the location of the  
15 systems; the equipment required; and then start running the procedure.  
16 I would like to point out one thing that we do read all this but this  
17 procedure here has been done many times on \_\_\_\_\_, so I understood. I  
18 understand what's going on, more so then if it was the first time that  
19 I've ever seen it.

20  
21 HUNTER: Right I understand that. So you went through the initial  
22 conditions, the equipment required, and some of the equipment as I  
23 understand it is already installed, and you may have gotten a stop  
24 watch or whatever it was you needed to run the procedure. Okay?

1 LIONARONS: Right.

2  
3 HUNTER: Then you got done to Section 6, which is actually the per-  
4 formance of the procedure.

5  
6 LIONARONS: Right. That's correct.

7  
8 HUNTER: How do you normally perform that procedure yourself? What  
9 do you do at that time?

10  
11 LIONARONS: We start right there at Section 6; we set procedure and  
12 read through the notes that are written there for our information, and  
13 then as it says here, we initial each step after we have completed it.  
14 Okay. So we'd come down--would you like me to go through the whole  
15 procedure? Step by step?

16  
17 HUNTER: Generally. Just how you'd handle it.

18  
19 LIONARONS: Like there's a few things like you've pointed out. Like we  
20 have an Eberline meter. We already have--all our meters are installed  
21 down there at this time. So then we go through the Appendix A, which  
22 is the valve line up, which allows us to run the pump on recirc.

23  
24 HUNTER: That's Appendix A or Appendix B?

1 LIONARONS: Appendix A or Appendix B according to which pump you're  
2 running, right. So I ran Appendix A because that was the pump. And  
3 then if you will notice, they're quite similar exactly the same, if I  
4 remember correctly.

5  
6 HUNTER: Did you recall if you did both of them? Appendix A and  
7 Appendix B that day?

8  
9 LIONARONS: Right. Yeah, I did Appendix A and B. Because, like I  
10 said, this allows us to run the pump or recirc, so we're lining up the  
11 valves accordingly. And then, like I said before, they're exactly the  
12 same. I don't think there's a shade of difference between Appendix A  
13 and Appendix B.

14  
15 HUNTER: Okay. Would you--

16  
17 LIONARONS: We'd be lining up the suctions exactly the same.

18  
19 HUNTER: Would do then do the Appendix A and B check lists at the same  
20 time or would you do one and then the other?

21  
22 LIONARONS: No. I would do both at the same time.

23  
24 HUNTER: Alright. So you would have done Appendix A and B that  
25 morning? And run the A and then the B pump?

1 LIONARONS: Right.

2  
3 HUNTER: Okay, go ahead.

4  
5 LIONARONS: Continued on, we run our precheck list prior to running  
6 the pump.

7  
8 HUNTER: Would like to uh...?

9  
10 LIONARONS: Checking lubrication, making sure we had oil.

11  
12 HUNTER: Certainly no problem.

13  
14 LIONARONS: Make sure that the seals are going to go alright. Make  
15 sure there's no equipment needed. I'd phone in, yeah.

16  
17 HUNTER: Hey John just, you know, relax. Don't worry about it. I  
18 want...

19  
20 LIONARONS: No. I wanted to point out one thing here to you before  
21 you went away. I went to that next step. This next step here, okay,  
22 6.1.5 I questioned the CRO about, okay, which was -- we don't have a  
23 local switch -- a local push button for that valve. EFV 27A is inter-  
24 locked with the pump motor to open and supply same water when the pump  
25 is started.

1 HUNTER: Okay.

2  
3 LIONARONS: Okay? So like now that probably wasn't signed off by  
4 myself.

5  
6 HUNTER: When you started the pump, then the valve came open?

7  
8 LIONARONS: Right. Because this part of the scope is procedure is...  
9 at this frequency or this time that we'd run the pump, we also check  
10 the valves. Okay?

11  
12 HUNTER: Right.

13  
14 LIONARONS: And that valve is part of the procedure: to check the time  
15 it's opening. So that's the whole, you know, that's the intent of  
16 this particular step right here. It's to record the time on the  
17 stroke of the valve.

18  
19 HUNTER: Okay.

20  
21 LIONARONS: So we wouldn't be able to do that as the procedure reads;  
22 so that was a deviation...

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23  
24 HUNTER: Okay.  
25



1 LIONARONS: Procedure, and that included that.

2  
3 HUNTER: Okay.

4  
5 LIONARONS: Closed, it is closed. Okay.

6  
7 HUNTER: Alright. Now in Appendix A, it indicates that you would  
8 close EF 12A and EF 12B.

9  
10 LIONARONS: Right.

11  
12 HUNTER: Are these closed remotely or at the central board or down at  
13 the pump area?

14  
15 LIONARONS: They can be operated from two places. They can be operated  
16 from out in the plant by our switchgear, which is not near the pumps  
17 in the auxiliary building near the 305 elevation, and it can be operated  
18 from the control room which is normally operated and were operated  
19 from.

20  
21 HUNTER: So that morning, they were operated from the control board?

22  
23 LIONARONS: Right.

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24  
25

1 HUNTER: Did you call somebody to have them close those valves?

2  
3 LIONARONS: No. I was right there.

4  
5 HUNTER: In the...I understand that you don't operate the control  
6 board, but would Mr. Cooper or somebody else or...

7  
8 LIONARONS: Hemmila, Mr. Hemmila.

9  
10 HUNTER: Earl Hemmila would he have operated them.

11  
12 LIONARONS: Right.

13  
14 HUNTER: Okay.

15  
16 LIONARONS: They would have been operated by a CRO the reactor operator.

17  
18 HUNTER: Right. Can you remember what time you started this test?

19  
20 LIONARONS: It would be early morning I'd say around 9:00.

21  
22 HUNTER: Okay.

23  
24 LIONARONS: Maybe earlier, 8:30.

1 HUNTER: 8:30. Alright. So then you got lined up, you've got the  
2 pump running, you know, you've done the valve lineups; you would do  
3 the A pump. At that time, would you then take specific data and fill  
4 in the data sheets as required?

5  
6 LIONARONS: That's correct.

7  
8 HUNTER: Did you go through this procedure?

9  
10 LIONARONS: Right.

11  
12 HUNTER: And uh. Okay. Then you'd do the B pump and do the data on  
13 that. Okay. You've got the data completed and let me go down to  
14 the... we'll pick the end of the procedure. You do both of them at  
15 the same time. Okay. You would actually have gone all the way through  
16 down to step 6.2.17. The data is is complete, everything is done and  
17 the last step is to ensure 8A and B opened, 12A and B opened, 7A and B  
18 closed, and 39 and 40 closed.

19  
20 LIONARONS: Right.

21  
22 HUNTER: Do you recall that particular step?

23  
24 LIONARONS: Sure. Yeah.

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25

1 HUNTER: Did you sign it off on the procedure you were running?

2  
3 LIONARONS: Yes, I did.

4  
5 HUNTER: Uh, who'd you give the procedure to?

6  
7 LIONARONS: CRO: That control room operator Earl Hemmila.

8  
9 HUNTER: So you gave it to Earl.

10  
11 LIONARONS: Right.

12  
13 HUNTER: Okay, and it was signed off?

14  
15 LIONARONS: Right.

16  
17 HUNTER: Okay. Is that your normal habit of doing these procedures?  
18 Do you always go down through and sign off the procedure as this re-  
19 quires? Is that the way you do this?

20  
21 LIONARONS: Yeah I do. Mm hum.

22  
23 HUNTER: And do you know what Earl did with the procedure after you  
24 gave it to him?

25  
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1 LIONARONS: No.

2  
3 HUNTER: Okay. No idea. How did you verify these particular valves in  
4 that position?

5  
6 LIONARONS: EFV-39 and 40 are the manual recirc valves. They are a  
7 locked closed valve normally. So after we ran the pump on recirc  
8 which was through EFV-39 and 40, we reshut 39 and 40 and ensured they  
9 were locked. Then we proceeded to go upstairs, went to the control  
10 room to the control board, and at that time we met with Marty Cooper  
11 and Earl Hemmila and read the step off 6.2.17, and when they told me  
12 that the valves were realigned, it was signed off.

13  
14 HUNTER: Okay. Go back now, and you said that when they told you they  
15 were realigned, did you actually operate the valves?

16  
17 LIONARONS: No I did not operate the valves on the control panel.

18  
19 HUNTER: Did you, in fact, see the valve operating or verify the red  
20 light on yourselves personally? In other words, as I remembered, did  
21 you end up...?

22  
23 LIONARONS: No. Are you saying; can I see that red light in my head  
24 or the green light?

25  
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1 HUNTER: Yeah. Do you remember looking at it?

2  
3 LIONARONS: No, I can't see that.

4  
5 HUNTER: Are you going over and see yes those are open and yes those  
6 are closed?

7  
8 LIONARONS: No.

9  
10 HUNTER: Would you normally do that or would you just let them tell  
11 you that they're open or closed?

12  
13 LIONARONS: Probably, normally let them tell me that it's open or  
14 closed cause I could of done that from the local. I could of called  
15 up on the phone and had them phone them up.

16  
17 HUNTER: Go back again, Kevin, and try to talk to us through the last  
18 step. You had finished and I'll assume that you are on your way then  
19 back to to the control room. And you got to the control room did the  
20 procedure. And walk through real carefully, 6.2.17 again. Again, as  
21 you recall, or the best recall, specifically how you signed that  
22 particular step off?

23  
24 LIONARONS: Okay. I came up to the control room, up to the control  
25 panel. Like I said I met with Marty Cooper who had the panel, which

1 was standing in front of the panel. And Earl Hemmila, which was the  
2 control room operator directing the surveillance. Okay. Earl asked  
3 me if we were done, and that means have we got our data complete,  
4 cause he knew we were finished, cause the pump was shut off. So yes  
5 we were done, and I said the last step, we've gotta realign the EFV-8,  
6 12's and 7's, and I said the 39 and 40 were already done.

7  
8 HUNTER: Okay. And then his indication to you after that? Or was  
9 that where you dropped it?

10  
11 RESNER: What was his response?

12  
13 HUNTER: What was his response? Was it that okay...

14  
15 LIONARONS: His response was...

16  
17 HUNTER: We have to realign these valves.

18  
19 LIONARONS: The valves were realigned.

20  
21 HUNTER: Oral, verbally to you...

22  
23 LIONARONS: Right. And then we got into a discussion on a question  
24 that I had. And then I said after we finished our discussion (which  
25 was on those valves not 12's in particular but the 7 and 8's) that I

1 said "Okay this is signed off" or this is done". And they acknowledged  
2 the valves were realigned and that was it.

3  
4 HUNTER: What was the discussion?

5  
6 LIONARONS: I had a question on EFV-7 and 8's. I wasn't... see we run  
7 those on recirc back to the condenser. And normally they were lined  
8 up to the condensate storage tank. And I was wondering why they  
9 weren't lined back up just... We were taking a suction... we would  
10 normally take a suction from the condensate system during a loss of  
11 normal feed. So I questioned him about that and they were explaining  
12 to me about 7 and 8's positions where they were lined up.

13  
14 HUNTER: All right, EFV-8A and B is open; that opens a recirc to  
15 where?

16  
17 LIONARONS: Back to the condensate storage tanks.

18  
19 HUNTER: Alright. And 12A and B are the header valves; these I assume  
20 would be open...

21  
22 LIONARONS: Right. Right.

23  
24 HUNTER: 78 and B is closed; that's the recirc back to the condenser?



1 LIONARONS: Right.

2  
3 HUNTER: And the question was, why recirc back to the condensate tank  
4 versus the condenser? And...

5  
6 LIONARONS: When we'd be taking a suction during a loss of feed, we'd  
7 be lined up to take a suction off the condensate system.

8  
9 HUNTER: During a blackout or loss of feed with the...

10  
11 LIONARONS: Right...

12  
13 HUNTER: --condensate pumps the suction would then...

14  
15 LIONARONS: ... \_\_\_\_\_ feed pump...

16  
17 HUNTER: ... feed pumps okay ...

18  
19 LIONARONS: Yeah. And we'd take a suction off them.

20  
21 HUNTER: Okay and 39 and 40 were local manual closed and locked closed.  
22 Do you know if those were logged in the control room log book as being  
23 returned to their lock closed position or would you have done that?

24  
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1 LIONARONS: No, I didn't uh..

2  
3 HUNTER: Go ahead ...

4  
5 LIONARONS: No, they weren't.

6  
7 HUNTER: If they were, it was done by Earl? If they were logged?

8  
9 LIONARONS: I didn't do them.

10  
11 HUNTER: Okay.

12  
13 RESNER: Do you know who did do them?

14  
15 LIONARONS: Possibly Earl.

16  
17 HUNTER: The logging of the layout was locked back to normal locked  
18 close?

19  
20 LIONARONS: uh-huh...

21  
22 HUNTER: You acted on insulated valves LOCA and put the locks back on?

23  
24 LIONARONS: Right.

25  
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1 HUNTER: Okay. Alright. Taking any other surveillance, now, you gave  
2 this procedure intact then, as a whole, to Earl Hemmila?

3  
4 LIONARONS: Right.

5  
6 HUNTER: And then what he did with it,...uh...you're not aware?

7  
8 LIONARONS: Not officially, no.

9  
10 HUNTER: Okay, uh...

11  
12 LIONARONS: Only that I asked him afterwards.

13  
14 HUNTER: Alright. When? Right then?

15  
16 LIONARONS: No. After March 28th. [chuckle]

17  
18 HUNTER: Okay. When we pulled the green package, and this is the copy  
19 right here, this is the green sheet...

20  
21 LIONARONS: Right, right.

22  
23 HUNTER: You would find the green sheets indicating... Do you recall  
24 when you finished that particular test approximately? Now that's  
25 manhours, don't forget...

1 LIONARONS: Yeah, no, no I realize that. That's why it was six.  
2 Before :00, no, before lunch.

3  
4 HUNTER: Okay, like 8:30 to 10:00 or 11:00?

5  
6 LIONARONS: Right. Because I was going to eat lunch right after we  
7 finished that.

8  
9 HUNTER: Okay. It's logged out at 10:00. Does that sound reasonable?

10  
11 LIONARONS: Yeah, it could have been.

12  
13 HUNTER: I was more interested in when you started. You logged the  
14 data out and the time at 10:00 and he actually signed off at 12:45,  
15 got through, the shift foreman did. So would this be the time you took  
16 the data or when the test was finished? This particular time?

17  
18 LIONARONS: That would be the time that we collected that data right  
19 there.

20  
21 HUNTER: Okay so you may have run on out until 11 or so.

22  
23 LIONARONS: Right. You know, an hour is not much.

1 HUNTER: And what you recall, you were going to eat lunch right after  
2 you finished this.

3  
4 LIONARONS: Right.

5  
6 HUNTER: When do you normally eat lunch? That'd put...

7  
8 LIONARONS: Whenever we can.

9  
10 HUNTER: Okay. Do you recall on this day, realizing that it was a long  
11 hour?

12  
13 LIONARONS: No.

14  
15 HUNTER: But is it usually noon plus or minus an hour, or something  
16 like that?

17  
18 LIONARONS: No, it would be 11 plus or minus an hour.

19  
20 HUNTER: Okay, so it might have been 10:30 or 11:00, 11:30.

21  
22 LIONARONS: Yeah. Right.

23  
24 HUNTER: Okay. But it was really before early afternoon that this was  
25 finished.

1 LIONARONS: Right.

2  
3 HUNTER: That would put this system, Kevin, out of service or in the  
4 actual surveillance made like from 8:30 or 9:00 up to maybe 11:30...

5  
6 LIONARONS: Yeah, on emergency standby.

7  
8 HUNTER: or 12:00, whatever?

9  
10 LIONARONS: Uh-huh.

11  
12 HUNTER: Okay. Emergency standby, would you explain that?

13  
14 LIONARONS: The system is an ES system or engineering safeguards  
15 system and it's designed to supply feedwater to the steam generators  
16 when there's a loss of normal feed which is through our normal feedwater  
17 pumps.

18  
19 HUNTER: So you consider that as an emergency standby system? Is that  
20 what that was?

21  
22 LIONARONS: Right.

23  
24 HUNTER: Okay, now... the data sheets in the package are separated  
25 from the procedure and then the cover sheet of the procedures is into

1 the package. And this is what's in the file. The procedure and your  
2 sign offs are not in the file.

3  
4 LIONARONS: I realize that.

5  
6 HUNTER: I have no record... there is no record of you performing that  
7 particular test.

8  
9 LIONARONS: Right. I realize that. See I didn't know that at the  
10 time. And when I heard that, I was surprised. Because...

11  
12 HUNTER: Go ahead.

13  
14 LIONARONS: We do through and initial off all the steps...

15  
16 HUNTER: What about the other aux? What about the other auxiliary  
17 operator?

18  
19 LIONARONS: Oh he's an auxiliary operator from Unit 1 and we cross-  
20 trained so we stake our auxiliary operator aids with their auxiliary  
21 operator aids and vice versa; and uh Ed was working with me that day.

22  
23 HUNTER: Let's see, I believe I saw his name on here somewhere.

1 LIONARONS: Yeah right there.

2  
3 HUNTER: Ed Tennis?

4  
5 LIONARONS: Right.

6  
7 HUNTER: Ed Tennis?

8  
9 LIONARONS: Right.

10  
11 HUNTER: But did you...include does that means that he and you were  
12 working specifically together?

13  
14 LIONARONS: Right.

15  
16 HUNTER: Never not apart but actually...

17  
18 LIONARONS: No we work together all the time.

19  
20 HUNTER: Okay. Any information--did he go with you up to the control  
21 room when you actually got the system realigned?

22  
23 LIONARONS: Yes, yes he did.

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25



1 HUNTER: Were you explaining anything to him at that time or was he  
2 following the procedure step by step? Did he have...

3  
4 LIONARONS: At what time? At what time?

5  
6 HUNTER: Did he put the system back to normal, like opening the 8,  
7 the 12 valves? Did he happen to be standing with you, listening to  
8 Mr. Cooper or Earl saying "the valves are open"? Or was he actually  
9 looking at the valves himself? Do you...

10  
11 LIONARONS: You'd have to ask Ed because I don't want to say.

12  
13 HUNTER: He wasn't standing with you in some kind of discussion at  
14 that time listening to you discuss the 12 valves?

15  
16 LIONARONS: I don't remember. I don't remember.

17  
18 HUNTER: That's fine.

19  
20 RESNER: Ed who?

21  
22 LIONARONS: Ed Tennis.

23  
24 HUNTER: We can check with him. So what we've got down to again, and  
25 let me make sure I have all the information we need, is that the...

1 it's a routine test that you've run before as an AOA, as an auxiliary  
2 operator A who's done that morning sometime like around 9:00-12:00 or  
3 whatever...

4  
5 LIONARONS: Morning hours right.

6  
7 HUNTER: What... How long does it normally take you to do that test?  
8 That's a good... just a feel, if one or two of you are working. Is  
9 that about a three-hour test or two-hour test or...

10  
11 LIONARONS: Could be. On that particular morning we had problems with  
12 some valves so that took a little while longer. We were getting dual  
13 indication on our EFP7s, the recirculation valves to the condenser.  
14 So we had to cycle those up, had to send Ed up on the piping which is  
15 not at ground level. He had to climb for them, and then we had cycled  
16 those two or three times because we did have a dual indication, and we  
17 wanted to ensure that they were open. So that's... it's hard to  
18 pinpoint the time. But, you know, we went up and they had communications  
19 so we had to go down. They had a cycle and we had to send a man up.  
20 We had to be satisfied that they were open.

21  
22 HUNTER: Did you issue a maintenance order at that time?

23  
24 LIONARONS: No, I believe we cleared the dual indication, I think. Ed  
25 had gone up and checked to see if they were hung up at all, and then  
we had cycled them and then they got the straight indication.

1 HUNTER: So they must have not traveled fully the first time that...?  
2

3 LIONARONS: That's common.  
4

5 HUNTER: Was Earl aware of that?  
6

7 LIONARONS: Sure, he was around somewhere.  
8

9 HUNTER: So Earl then was aware that the valves had a partial to  
10 travel for the first time you tried them. Okay, so it's a couple hour  
11 test. You finish the data, you run both pumps, you did the valve line  
12 ups, you signed off all the steps, which is... That's the way you do  
13 business? What about what's his name Tennis, is that the way he does  
14 business? Does he sign off his surveillance sheet procedures? You'd  
15 have to ask Earl, I mean you'd have to ask Ed?  
16

17 LIONARONS: You'd have to ask Ed. It seems so; that's the procedure  
18 for an operator. You know, you'd have to talk to him.  
19

20 HUNTER: Yeah. The... would.. are you sensitive to the fact that  
21 Section 6.0 says "initial each step after satisfactory conclusion"?  
22

23 LIONARONS: Yeah.  
24  
25

899 161

1 HUNTER: Is that the way you're trained?

2  
3 LIONARONS: That's right.

4  
5 HUNTER: Some surveillance only has data sheets and doesn't require  
6 you to sign off a step. There may be some like that, but most of them  
7 that you run have actual steps that you sign off?

8  
9 LIONARONS: When we're running equipment like that, you do sign off  
10 steps.

11  
12 HUNTER: Okay.

13  
14 LIONARONS: You're going to look at a surveillance sheet that just  
15 requires you to take a reading or something like that, there is no  
16 steps.

17  
18 HUNTER: Right, okay.

19  
20 LIONARONS: So that's, but when we are running, you know, that's a  
21 major piece of equipment.

22  
23 HUNTER: Okay. You've completed a test, you went back upstairs, you  
24 go to the control room the... you were told that the 12 valves were  
25 back in their position?

1 LIONARONS: Right.

2  
3 HUNTER: The 8's, and the 12's and the 7's were in...

4  
5 LIONARONS: Right.

6  
7 HUNTER: But again you did not, in fact, walk to the control panel  
8 and look at the five valves, the pumps, the 12 valves...

9  
10 LIONARONS: I could find them on there if I wanted to look for them.

11  
12 HUNTER: But you did not...

13  
14 LIONARONS: But I am not acclimated to the panel where I could just  
15 look and tell. I kind of have to gawk for a little while.

16  
17 HUNTER: I understand that.

18  
19 LIONARONS: So...

20  
21 HUNTER: But that morning you did not in fact go over and verify by  
22 indication that they were open. Secondly, you did not go back down-  
23 stairs during that day, or did you, and verify those valves open?

24 809 163  
25

1 LIONARONS: No, I didn't go back downstairs and verify they were  
2 open, and under normal circumstances, I wouldn't do that.

3  
4 HUNTER: I understand that, but I just want to make sure that we've  
5 got all the strings tied, loose ends tied, so that we don't leave  
6 anything. Okay.

7  
8 LIONARONS: But, when we realigned that system back to normal; the  
9 way we were standing probably had something to do with why they were  
10 realigned, by whom they were realigned. Like I said, Marty had the  
11 panel, and it was myself reading the procedure and Earl standing to my  
12 right, and as I was reading them off...

13  
14 HUNTER: You were looking at the panel?

15  
16 LIONARONS: I was looking at the panel. Earl is to my right.

17  
18 HUNTER: And Cooper is over by the...?

19  
20 LIONARONS: No, Cooper is right directly on my left, and we're standing  
21 at the panel. The panel is directly in front of me. As I read the  
22 steps off, Marty repositioned the valves, and the only reason that  
23 Marty repositioned them instead of Earl, it's just partly a matter of  
24 convenience. Like, instead of Earl having to reach across in front of  
25 me and across in front of Marty to reach the valve that was here,

1 Marty would just reach up and reposition the valves. As I read them  
2 off, Marty repositioned them. And, like I say, did I see the valves  
3 actually change the colors from red to green? You know, I would like  
4 to say "yes I did," but more than likely, you know, I could of, but  
5 when something like this comes up and somebody says "did you see?" you  
6 know, you question in your own mind.

7  
8 HUNTER: Okay. Uh. You've run this surveillance procedure a number  
9 of times?

10  
11 LIONARONS: Right.

12  
13 RESNER: Let me interrupt. We'll break at this time to change the  
14 tape. The time is now 11:50 a.m.

15  
16 RESNER: This is a continuation of the interview with Mr. John Kevin  
17 Lionarons, and, as we broke to change the tape, Mr. Hunter was in the  
18 process of asking a question.

19  
20 HUNTER: We're to cover one more area concerning the surveillance.  
21 You have done the surveillance, as you indicated earlier a number of  
22 times. You're familiar with the surveillance, being part of your  
23 routine job; that's understandable. Part of this surveillance, this  
24 particular surveillance procedure, is to perform Appendix A and B; we  
25 discussed that earlier and they are identical. The performance of the

1 A, in fact, does require valve manipulations, and if a valve was not  
2 in a normal position, you would pick it up during the test. For  
3 instance, if the 12 valves were already closed when you started this  
4 test, or the 8 valves were out of position, or the 12s or the 11s were  
5 out of position during your performance of this surveillance, somebody  
6 would note that; you or Earl would make a mental note of the valve  
7 position.

8  
9 LIONARONS: Right. That's true.

10  
11 HUNTER: The question is, if in fact during the performance of this  
12 particular surveillance, and I would like to extend that a little  
13 bit--there's a 14 series of surveillances (A, B, C, D and E) which are  
14 valve lineup verifications the D and E; A, B and C are doing the  
15 turbine pump and valve...

16  
17 LIONARONS: That's true.

18  
19 HUNTER: But I would like to include that in the question, okay?

20  
21 LIONARONS: Okay.

22  
23 HUNTER: And I am sure you've done those tests, because it's the same  
24 type test on the other pump. Have you, in fact, as you did these  
25 surveillances, found any valves in an abnormal position?



1 LIONARONS: None that I can recall right at this time.

2  
3 HUNTER: Finding a valve in an abnormal position during a critical  
4 test, and I think you said this was major piece of equipment...

5  
6 LIONARONS: Sure, right, yeah...

7  
8 HUNTER: Should, uh, should be an item to remember. Even if you don't  
9 remember when or where or how the date... The point is, had you in  
10 fact found a valve in a position in other than what you had thought it  
11 should be and called Earl or whoever the surveillance key was, the  
12 control operator, and say "hey look, I have a valve out of position,"  
13 because I think the procedure says, especially the 14 says, if, in  
14 fact, you do a valve line up and you find anything out of position,  
15 notify the shift foreman. Have you ever done that? Have you ever had  
16 the case to call?

17  
18 LIONARONS: On that particular surveillance or any surveillance?

19  
20 HUNTER: Any surveillance. I want to... on any surveillance, have  
21 you found something out of position? I said I wanted to include the  
22 27A and B, I want to include the 14, but again I realize that you may  
23 be, as a AOA, you do decay removal pumps, you do... On surveillance,  
24 have you had to call your foreman and say, hey, there's something out  
25 of position?

1 LIONARONS: I can't recall anytime that I have had to call the control  
2 room on a valve that was out of position that was inadvertently left  
3 out of position. Now may be, yes, on red tag, but that -- like you  
4 said -- that didn't particularly stick in my mind because that's been  
5 done many times. You may be doing a surveillance that encompasses a  
6 piece of equipment that's legally tied down and you'd run on your valve  
7 line up. Yes. But as far as, have I inadvertently run across a valve  
8 that's closed on this procedure? No.

9  
10 HUNTER: Okay. You do routine walk arounds.

11  
12 LIONARONS: Right.

13  
14 HUNTER: Do you happen to pass the switch gear where these particular  
15 valves have a BEF 12 valve type of LOCA switch. Is the valve indicated  
16 on the switch gear as far as open and close.

17  
18 LIONARONS: Right yes.

19  
20 HUNTER: Have you ever looked at that and found those valves other  
21 than open.

22  
23 LIONARONS: Those particular valves, no.

1 HUNTER: Okay.

2  
3 LIONARONS: There's a slew of valves along that wall.

4  
5 HUNTER: Have you... Do you recall finding in any particular valves,  
6 or,...that have been in a wrong position like more than once, or do  
7 you recall finding a valve like decay heat valve, something or other,  
8 in other than normal position?

9  
10 LIONARONS: I'm not sure, I really... Like I know what you're asking  
11 but I don't see... Do you want to know if I ever had found any valves  
12 found any valves that...?

13  
14 HUNTER: Yes. I want to know if you ever had found any.

15  
16 LIONARONS: Yes. I have found valves out of position.

17  
18 HUNTER: Okay. Then if you have found valves out of position, again,  
19 do you recall what they were?

20  
21 LIONARONS: Allright? I found a valve out of position not too long  
22 ago. But I'm not sure what I'm getting into. I'm not... Do you want  
23 to dig into another system now? Is that what you want me to do?

24  
25 809 169

1 HUNTER: If, in fact, it was a safety related system, I would like to  
2 know if it was out of position.

3  
4 LIONARONS: Yes. I found a safety related valve out of position.

5  
6 HUNTER: Okay. Can you tell me which valve it was?

7  
8 LIONARONS: BHB 102A and you want a...

9  
10 HUNTER: Can you identify that?

11  
12 LIONARONS: Identify it. Okay. Because of the way our plant is  
13 designed, and the way our decay heat removal pump take a suction from  
14 our BWST or our reactor building sumps, and because this valve has  
15 failed it's stroke time, we have that valve, and we have it locked  
16 open. We have the valve open and the breaker open. The breaker is  
17 open and the valves is closed.

18  
19 HUNTER: Okay. Do you recall the way it was generally? But also  
20 even -- this is important -- who did you notify?

21  
22 LIONARONS: I notified the CRO.

23  
24 HUNTER: And the CRO would be who?

25  
809 170

1 LIONARONS: Dale Congeon.

2  
3 HUNTER: Congeon C-o-n-g-e-o-n.

4  
5 LIONARONS: Yeah that's right. That's correct.

6  
7 HUNTER: Okay. And what did he say at that time? Do you recall?

8  
9 LIONARONS: Close the breaker or open the -- yeah -- excuse me, close  
10 the breaker.

11  
12 HUNTER: So you went through an evolution; close, take the lock off,  
13 close the breaker, open the valve, open the breaker, and put the lock  
14 back on. Did you go through that evolution?

15  
16 LIONARONS: Right. Exactly that.

17  
18 HUNTER: Is there any other incidents -- excuse me -- 102A valve is  
19 from uh... is shut from BWST if I'm hearing you right, okay. Because  
20 there would be an A and B --you didn't find B also?

21  
22 LIONARONS: No, we check those on our readings.

23  
24 HUNTER: Okay.

809 171

25

1 LIONARONS: At that time I found it out of position.

2  
3 HUNTER: Do you recall, a month ago, uh two months ago, was that that  
4 particular incident? Was it recently, the reason you recall?

5  
6 LIONARONS: Recently in terms of four months.

7  
8 RESNER: Which would have been, right about when during the month?  
9 What month what day?

10  
11 LIONARONS: See, you're asking me, I'm not really sure, because I was  
12 on a different shift at that time. I was trying to relate when I had  
13 switched shifts. See I was on with Joe and Seesha.

14  
15 HUNTER: When did you shift?

16  
17 LIONARONS: I don't know, I was trying to remember. When our shift  
18 was formulated.

19  
20 HUNTER: Was that when you fellows went to a sixth shift?

21  
22 LIONARONS: Right.

23  
24 HUNTER: Okay, we'll can get that then.

25  
809 172

1 LIONARONS: It was right before that, maybe.

2  
3 HUNTER: Just before sixth shift.

4  
5 LIONARONS: It was from the time that I was notified. So that was  
6 right before the six shifts.

7  
8 HUNTER: Do you recall seeing any...? Let me ask you, during this  
9 type of reading and all that was in an abnormal position.

10  
11 LIONARONS: Right.

12  
13 HUNTER: I might, may I assume that... Can you recall the condition  
14 of the plant? Was it at hot shutdown or how...? What was running  
15 that day. The main feed pumps were running?

16  
17 LIONARONS: Well, let's put it this way. It was in a position, the  
18 plant was in a status where you wouldn't want that valve shut.

19  
20 HUNTER: Okay.

21  
22 LIONARONS: Okay.

23  
24 HUNTER: Not that I can't remember but then I'll say where do you go  
25 next? And you'll say, I go by the main feed pumps. And then, were

1 they running or were they not? Yes, they were. We were at power; the  
2 valve should of been on, but you, it was then on you, because you  
3 realize the plant was in condition, that valve should of been on from  
4 past performance...

5  
6 LIONARONS: Right. When I looked at that and saw that the valve was  
7 shut, and it kind of set you back a little bit. Plus, there was some-  
8 thing that went along with that too, which probably isn't relevant,  
9 but the...

10  
11 HUNTER: Go ahead. Once you said something was not relevant. Go  
12 ahead.

13  
14 LIONARONS: No it wasn't. It wasn't relevant to that.

15  
16 HUNTER: What about another bag, or another case where the pump was  
17 in full to lock or valve in not in the normal position. Am I building,  
18 am I spreading my wings a little bit.

19  
20 LIONARONS: No, I can't think of anything like that.

21  
22 HUNTER: Nothing specific. Okay. Would you say that this is very  
23 unusual.



1 LIONARONS: Yeah, highly unusual.

2  
3 HUNTER: Would you say that, have you, you've been here a year or so,  
4 you know, whatever have you seen this kind of thing very often?

5  
6 LIONARONS: Not on the power like that, no.

7  
8 HUNTER: Did you ask why it was in a closed position or did you go  
9 back and say, hey look, I would like to know why it was closed? Was  
10 it after surveillance?

11  
12 LIONARONS: Well, I asked if it was supposed to be closed, which I  
13 knew it wasn't supposed to be closed. Right. So you ask that "Joe  
14 why have you got the BH2B closed." You know like...

15  
16 HUNTER: The indications for that valve local are but also up on the  
17 control room.

18  
19 LIONARONS: I don't know. I can't tell you for sure because I don't  
20 know. I know they do have indication for that valve up there, but I  
21 don't know if they have indication for that valve up there when the  
22 breaker is open.

23  
24 HUNTER: Right. Would you say, I believe they do have.  
25

1 LIONARONS: Okay.

2  
3 HUNTER: They are local at the switch gear to the lights... The  
4 breaker you had to read the position of the breaker.

5  
6 LIONARONS: Oh right, right. The breaker is either open or it's  
7 closed.

8  
9 HUNTER: Right. And the breaker was in fact closed, I mean, was  
10 open.

11  
12 LIONARONS: The breaker was open.

13  
14 HUNTER: But the lights on the breaker, like the motor control center,  
15 is that... where you read it, or do read it somewhere else?

16  
17 LIONARONS: No, on those particular valves, because they are what they  
18 are, we check those manual -- we check those physically.

19  
20 HUNTER: Do you actually go down and check the stem?

21  
22 LIONARONS: We go down and check the stem on that valve. That's in  
23 our decay heat ball.

24 889 176  
25

1 HUNTER: Do you that once per shift? Is that the kind of thing to do  
2 one per shift.

3  
4 LIONARONS: No. Yes, once per shift right.

5  
6 HUNTER: Did you log that on the shift, on your shift, on your log.

7  
8 LIONARONS: I don't remember.

9  
10 HUNTER: Would you normally do that?

11  
12 LIONARONS: I would seem so.

13  
14 HUNTER: You know, you would say abnormal BAQ 102 found closed or  
15 open.

16  
17 LIONARONS: Yeah, I believe I would, because it does ask. Well  
18 that's the position of it.

19  
20 HUNTER: So you would have logged it closed and then had + ...

21  
22 LIONARONS: I may of logged it open and noted that it was found  
23 closed.

24 809 177

25

1 HUNTER: Okay. Alright. We've gone through pumps and valves and  
2 doing your routine surveillance and you're taking specific readings so  
3 and it must be apparent to you. It is apparent, I'm sure, that you're  
4 taking those like the shift readings and you're logging them open or  
5 closed or whatever, and there's a reason for it, because it's in that  
6 mode performance type sheet in this kind of verification.

7  
8 LIONARONS: That's a mode check list.

9  
10 HUNTER: Right and so in the mode check, list you would take that  
11 up... Okay. Uh.

12  
13 LIONARONS: Plus, we do know the status of the plant. We do how it  
14 operates.

15  
16 HUNTER: I would hope so.

17  
18 LIONARONS: You know, we would know that a valve like that.

19  
20 HUNTER: You haven't found anything since that day that... So that  
21 was like a few months ago and since then you've had... You haven't  
22 found any...

23  
24 LIONARONS: It's like, you say, something like that is a rarity.

25

899 178

1 HUNTER: Are you aware of special operation of the emergency feedwater  
2 valves, or the 11 valves or the 12 valves where they would be inad-  
3 vertently or intentionally kept closed? Are you aware of anything  
4 like that? Have you ever heard of anything discussed like that where  
5 the valves actually intentionally kept closed or the 11 valves intention-  
6 ally kept in manual rather than the 12 valves being open as they  
7 should and the 11 valves being allowed to open as they should at 30...

8  
9 LIONARONS: Right. Right.

10  
11 HUNTER: Okay.

12  
13 LIONARONS: No.

14  
15 HUNTER: I don't have any further questions Kevin. We would like to  
16 catch the tail end of that sheet, those three questions, right now.

17  
18 RESNER: Before going on I would like to ask you a couple of question,  
19 if we can digress a moment. When you found that valve that was in  
20 abnormal position, what percent power were you?

21  
22 LIONARONS: I don't remember. It's like I pointed out. It was that...  
23 It was in a period in a, where the plant was at a position where that  
24 valves shouldn't have been in that position.

1 RESNER: Okay.

2  
3 LIONARONS: So, you know, I would say that we're at a power status as  
4 opposed to be in a shutdown like a mode 3 or 4 or 5.

5  
6 RESNER: Okay. Thank you. The thing that we discussed that you said  
7 you didn't feel was relevant, what were you speaking of?

8  
9 LIONARONS: It was a personal thing that related to that.

10  
11 RESNER: Allright. Inadvertently, did not ask you the three questions,  
12 which are on the second page of the advisement document which we  
13 covered at the beginning of the interview. So for the record, I would  
14 like to get those on the tape now. Question 1, do you understand the  
15 above and this is in reference to the advice of the document? And you  
16 have checked yes. Is that correct?

17  
18 LIONARONS: That's correct.

19  
20 RESNER: Question 2, do we have permission to tape the interview?  
21 You have checked yes. Is that correct?

22  
23 LIONARONS: That's correct.

24  
25  
809 180

1 RESNER: Question 3, do you want a copy of the tape. You have checked  
2 yes. Is that correct?

3  
4 LIONARONS: That's correct.

5  
6 RESNER: Okay. We'll provide you a copy of the tape shortly after  
7 the interview is concluded. The time now is 12:07 p.m., and this  
8 concludes the interview of Mr. John Kevin Lionarons.

9  
10  
11 809 181  
12  
13  
14  
15  
16  
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19  
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21  
22  
23  
24  
25