

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

1 In the Matter of:

2 IE TMI INVESTIGATION INTERVIEW

3 of Dennis I. Olson
4 Control Room Operator

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

13 May 20, 1979

14 (Date of Interview)

15 July 9, 1979

16 (Date Transcript Typed)

17 231

18 (Tape Number(s))

19
20
21 NRC PERSONNEL:
22 Dorwin R. Hunter
23 William H. Foster

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25 894 320

1 FOSTER: The following interview is being conducted of Mr. Dennis I. Olson.
2 Mr. Olson is a Control Room Operator at TMI Nuclear Power Facility. The
3 present time is 3:01 p.m. Today's date is May 20, 1979. The place of the
4 interview is Trailer 203 located immediately outside the south gate of the
5 TMI site. Individuals present for the interview are, Interviewer Dorwin R.
6 Hunter. Mr. Hunter is an Inspection Specialist with the I&E Performance
7 Appraisal Branch. My name is William H. Foster. I am a Senior Inspec-
8 tor/Auditor with the Office of the Inspector and Auditor with NRC and I
9 will be monitoring the interview. Prior to the interview being recorded,
10 Mr. Olson was provided a document explaining his rights concerning informa-
11 tion being obtained regarding the incident at TMI. In addition, Mr. Olson
12 was apprised of the purpose of the investigation, its scope and the authority
13 by which the Congress authorizes the NRC to conduct an investigation. On
14 the second page of the body advising document, Mr. Olson has answered three
15 questions. The questions and Mr. Olson's answered will now be recorded as
16 part of the interview.

17
18 FOSTER: Mr. Olson, do you understand the document?

19
20 OLSON: Yes

21
22 FOSTER: Do we have your permission to tape the interview?

23
24 OLSON: Yes

25
894 321

1 FOSTER: Would you like a copy of the tape?
2

3 OLSON: Yes
4

5 FOSTER: Mr. Olson, at this time if you would, could you provide us with a
6 brief summary of your pertinent academic background and employment history
7 as they relate to the nuclear field?
8

9 OLSON: Well, I am a high school graduate. When I got out of school I
10 worked with a construction firm for about a year and I went in the service
11 and was in the service for eight years. Spent five years on a nuclear
12 submarine. I got out of the service, I came to work here. I have been
13 here for eight years.
14

15 FOSTER: Okay thank you I will now turn this over to Mr. Hunter.
16

17 HUNTER: Daniel, Dennis your position in the Navy, were you a machinist
18 mate/electrician?
19

20 OLSON: Machinist Mate/First Class
21

22 HUNTER: Machinist/maintenance. Can you give us the time, the approximate
23 time of day you arrived onsite at Unit 1 on the 28th?
24
25

1 OLSON: I was supposed to start shift at 7 o'clock in the morning. I was
2 running a little bit late and I got held up at the north gate by a train.
3 I did not get through the research building up there until a couple of
4 minutes before seven o'clock, and one of the security people told me I
5 could not go in. I asked him why not and he said they have a site emergency
6 in Unit 2 and I said that is all the more reason why I am going, and I
7 went, and I got started over that way and I figured well, maybe I'd better
8 not go through, I oughta just go up to the Unit 1 Control Room. My super-
9 visor was up there and I asked him if I should stay there or go on over and
10 he said stay here. So I did not get over to Unit 2 til about 10:30 that
11 morning.

12
13 HUNTER: Okay Dennis, and when you got to Unit 2, can you describe your
14 path of entry and what the activities you ended up being involved in imme-
15 diately?

16
17 OLSON: I went out through Unit 1 and down through the access hallway
18 there, over to Unit 2 and went, I don't know what the door numbers are, but
19 I went up that door and up the back steps and into the Control Room.

20
21 HUNTER: And when you got into the Unit 2 Control Room, what did you observe?

22
23 OLSON: A thousand people.

24 894 323
25

1 HUNTER: A lot of people.

2
3 OLSON: A lot of people.

4
5 HUNTER: And was that due to a particular reason everyone was there, the
6 emergency control center was there at the time, or was it just a mustering?

7
8 OLSON: I don't even really remember.

9
10 HUNTER: Okay, where did you go then in Unit 2 Control Room?

11
12 OLSON: I stayed in the Control Room and answered the phones for most of
13 the day.

14
15 HUNTER: In answering the phones, were you at the control room operator's
16 desk or shift supervisor's office?

17
18 OLSON: No, I was right out there where the desks are, where the guy does
19 the switching.

20
21 HUNTER: Switching the tags and desks?

22
23 OLSON: Tags and desks, yes.

24 894 324

25

1 HUNTER: Did you get involved in any evolutions during the day time other
2 than answering the phones?

3
4 OLSON: Not til after about 3 o'clock.

5
6 HUNTER: Okay, and what did you get involved with at that time?

7
8 OLSON: I was over where the makeup tank controls are, adding water and
9 controlling, more or less trying to control the pressurizer level, and
10 pressure at that time, because they had already gotten rid of the bubble in
11 the A loop. So I did that from 3:30 til about 5:30 - 6:00 o'clock when I
12 got relieved. Seven o'clock I believe it was.

13
14 HUNTER: Okay Dennis, then after you were relieved, where did you go?

15
16 OLSON: They told us we were supposed to go over to the five hundred KV
17 substation and get our automobiles surveyed and checked out so we were not
18 contaminated or anything. That's where I went.

19
20 HUNTER: Did you end up getting processed at the five hundred foot yard and
21 then going home?

22
23 OLSON: Yes.

24 894 325
25

1 HUNTER: After that?

2
3 OLSON: Yes.

4
5 HUNTER: How long did it take you?

6
7 OLSON: Not very long.

8
9 HUNTER: Some of the fellows were contaminated, were you contaminated to
10 any degree?

11
12 OLSON: No, not at all.

13
14 HUNTER: Okay, let's go back and concentrate. The two things, when you
15 were answering the phones Dennis, who were you generally talking with? Was
16 this like an outside phone calls coming in, or between the Units?

17
18 OLSON: I don't even remember. Everytime the phone rang I just picked it
19 up.

20
21 HUNTER: Did you have a phone log or anything that you kept during that
22 time?

23
24 OLSON: No.

894 326

25

1 HUNTER: Okay, did you write it on anything down on like a note type paper
2 or anything?

3
4 OLSON: No I didn't.

5
6 HUNTER: Nobody gave you any instructions?

7
8 OLSON: No. I didn't write anything down.

9
10 HUNTER: Okay, then at 3 o'clock approximately 3:00 - 3:30 you indicated
11 that you ended up over at the makeup panel. Who was there at that time, do
12 you recall?

13
14 OLSON: Fred Schelling, I believe.

15
16 HUNTER: Anyone else?

17
18 OLSON: Well there were he was there. The shift su

19
20 HUNTER: Craig Faust, do you remember?

21
22 OLSON: Yes, I think he was.

23
24 HUNTER: Ed Fredericks

25
894 327

1 OLSON: Well, they were, they had had the console but they were more or
2 less spread all over things, all of them weren't at one spot.

3
4 HUNTER: I sort of get the impression, I get the impression that they had
5 been assigned control room operator and a foreman almost to each panel,
6 would that be your understanding at that time?

7
8 OLSON: Yes

9
10 HUNTER: How many people did you, would there be in the area of the makeup
11 panel?

12
13 OLSON: Well I was there and I think my supervisor was there at that time.

14
15 HUNTER: Who would that be?

16
17 OLSON: Greg Hitz. And Mark Holman ended up relieving Ed Fredericks, I
18 believe.

19
20 HUNTER: Okay, what about over behind the panel. You are standing at the
21 makeup panel, and you would be looking at the makeup tank, the makeup pumps
22 and looking over the panel makeup at the high pressure injection flow paths
23 at that time.

1 OLSON: They were using those too.

2
3 HUNTER: Do you recall the high pressure injection flow paths and and the
4 flows that were being used while you were there? Was somebody reading them
5 and calling them out to you or were you actually reading them?

6
7 OLSON: There was a guy back there I don't really recall who it was. I
8 know we were not supposed to go over 250 gallon a minute flow through each
9 leg, but I don't recall what the numbers that he was spitting back at me
10 either.

11
12 HUNTER: Do you recall the number of pumps you had on at that time?

13
14 OLSON: No

15
16 HUNTER: Okay.

17
18 OLSON: It has been so long ago it is hard to remember everything.

19
20 HUNTER: _____

21
22 OLSON: 54 days.

23
24 HUNTER: Has it been that long?

25
894 329

1 OLSON: Um hum. I figured it out last night.

2
3 HUNTER: Yes, time passes when you have problems. I realize that. Okay
4 you recall what the pressurizer level was when you were standing there?

5
6 OLSON: No I don't.

7
8 HUNTER: The pressurizer pressure.

9
10 OLSON: No

11
12 HUNTER: What about any building isolation? Did any building isolations,
13 that contain the high pressure, occur while you were there?

14
15 OLSON: Uh, not that I can remember. I - that was -- from what I remember,
16 that was before I ever got up on the panel.

17
18 HUNTER: What about the core flood tanks? Do you remember anything about
19 the core flood tanks?

20
21 OLSON: I know we put some water in from the core flood tanks but I can't
22 remember whether it was that specific that day, or whether it was one of
23 the other days, because I was in that same spot for about a week.

1 HUNTER: Working on a makeup panel and the aux.

2
3 OLSON: Venting and trying to get rid of the bubble and all that.

4
5 HUNTER: Okay, do you recall any manipulations, while you were there, with
6 the core flood tank isolation valves, the inlet valves to the reactor?

7
8 OLSON: No.

9
10 HUNTER: Do you recall stopping or starting any makeup pumps while you were
11 there?

12
13 OLSON: No! I don't believe I did start or stop that.

14
15 HUNTER: So whatever was there, you think, operated all the time you were
16 at the panel?

17
18 OLSON: Um hum.

19
20 HUNTER: Okay

21
22 OLSON: As far as I can remember.

23
24 HUNTER: Alright, um, what mode were you using to maintain makeup level at
25 that time? Makeup tank level?

1 OLSON: As far as I can remember, we had let down and whenever level got
2 low, we would add from the bleed tanks as far as I can remember.

3
4 HUNTER: The normal mode then, connecting the bleed tanks, started a transfer
5 pump and makeup right into the make up tank?

6
7 OLSON: Right in the makeup tank. Or I don't remember whether one of the
8 DHV five valves was open when we were going from the BWST

9
10 HUNTER: If you were going from the BWST, would the makeup tank be a problem?

11
12 OLSON: No.

13
14 HUNTER: Would you be using that?

15
16 OLSON: No.

17
18 HUNTER: Or would you be having trouble? How would you maintain or would
19 you have to maintain a level in the makeup tank?

20
21 OLSON: It is not that much of a problem coming from the BWST.

22
23 HUNTER: Do you recall whether the makeup pumps recirc valves were open at
24 that time?

1 OLSON: As far as I know yes

2
3 HUNTER: Would they be recirc back to the the makeup tank?

4
5 OLSON: Yes

6
7 HUNTER: How would you control makeup tank level under those conditions?

8
9 OLSON: If the level got to too high, shut the onlet valve from the BWST
10 just suck from the makeup tank.

11
12 HUNTER: Do you recall doing that during that time?

13
14 OLSON: No.

15
16 HUNTER: Okay

17
18 OLSON: Laughter.

19
20 HUNTER: You mentioned letdown, try to concentrate on letdown. You know
21 that particular role of what was happening. Letdown flow, was letdown flow
22 a problem while you were there? Were you having difficulties with letdown
23 or was it?

24 894 333
25

1 OLSON: Not, not at that time I don't believe.

2
3 HUNTER: Do you recall what the letdown flow was? Or was it zero?

4
5 OLSON: I don't know.

6
7 HUNTER: You don't remember. Were you having to put respirators on and off
8 during that time that you were there after three? Were you being placed in
9 on respirators and out of respirators

10
11 OLSON: I don't remember what time they brought the respirators in, but we
12 were in respirators for a while, a few hours at least, I know because I had
13 a headache when I took the damn thing off.

14
15 HUNTER: Okay,

16
17 OLSON: But I don't remember how long it was, or what time we put them on.

18
19 HUNTER: Is there any other activity you were involved in we need to talk
20 about?

21
22 OLSON: That's

23
24 HUNTER: Is there something I can ask you to try to any that you recall and
25 part of it?

1 OLSON: That's really about all I did, and that's for a period of three
2 hours is just trying to control pressure, trying to control the level. I
3 don't remember where they were at the time.

4
5 HUNTER: Do you recall orders or instructions given to you concerning the
6 high pressure injection flow at that time? Or did you receive any new
7 instructions at 3 or after 3 as far as high pressure injection flow and
8 what to do with high pressure injection levels?

9
10 OLSON: Not that I can remember.

11
12 HUNTER: From Greg Hitz or anyone?

13
14 OLSON: Not specifically from what I can remember.

15
16 HUNTER: From Fred Scheimann?

17
18 OLSON: No

19
20 HUNTER: Bill Zewe? Sometimes if you will just think about it you will say
21 oh, yes maybe the guy did, I remember the spike or I remember something.
22 Okay was there any other activities that you recall being involved in that
23 day that would key into the chronology where we will know where you were
24 and maybe you can enlighten us in these areas we're looking for information.

25
894 335

1 OLSON: That was about all that I did. I can't recall anything else I did
2 at all.

3
4 HUNTER: Okay and as I understand it you worked there from about 3 - 3:30
5 till about seven, you were relieved, went to the switch yard and got processed
6 out. You came back, what, on the day shift the next day?

7
8 OLSON: Yes

9
10 HUNTER: Okay, and you stayed in the control room for a number of days
11 after that?

12
13 OLSON: Right, yes; I never went in the aux building or anywhere.

14
15 HUNTER: Okay so we will know where you were and what to talk about. Okay
16 let me get one other item I want to check out. I have training records
17 that are your records of your training. I wanted to ask you a couple of
18 questions. In your training record, last August, it indicates that you had
19 some requal. experience, an hour of requal, which included reportable
20 occurrences, operating history, and operating experiences. Can you recall
21 anything like that at that time? What that would include?

22
23 OLSON: What I think happened there. I had had an accident July 14 and
24 where I broke my nose and broke my jaw and had my mouth wired.
25

1 HUNTER: Was that right after you had had some fire fighting training? July
2 14 you had a car accident?

3
4 OLSON: Yes and I was in the hospital for a while and I'd missed 15 days
5 work and when I came back to work, I still had my jaw wired closed and
6 there for a while, they would not let me exercise my license because they
7 figured I would not be able to talk, yell and scream and holler so all I
8 did was more or less was take care of paper work and it was going through
9 reviewing procedures they had, and I think I actually missed that training
10 lecture, but they sent me a care package, that is what we call them when we
11 miss a lecture, they sent it up to you and you read it and sign sheets in
12 the back. I don't remember whether I was actually at the lecture or whether
13 I read the thing that he sent up to me.

14
15 HUNTER: What is a reportable occurrence to you? What does that mean?

16
17 OLSON: Hmmmm,

18
19 HUNTER: Does that have any real meaning as far as that particular name? A
20 licensee event reportable occurrence or

21
22 OLSON: Things that aren't -- things that happen or -- I don't know how to
23 define it.

24 894 337
25

1 HUNTER: What about, look back in 1978 there were some plant transients, at
2 TMI-2 and you may have been involved in some of them specifically, on the
3 control panel, or you may not have been involved specifically like Bill
4 Zewe's shift, I know, had some transients from feedwater water recirc
5 valve, that type of transient, did you receive any formal training relative
6 to review of those transients or review of operating experiences?
7

8 OLSON: The only thing I can remember reading on those was after they kind
9 of sit down and put all the pieces together when they write up a little
10 report like.
11

12 HUNTER: And they send that out the care package
13

14 OLSON: No, not really, it was just in the control room and Gregg said all
15 you guys read this.
16

17 HUNTER: Did you sign off on it?
18

19 OLSON: I don't remember if I did or not. A lot of times he will hand out
20 things he wants us to read and he will draw a line on it, and he wants u...
21

22 HUNTER: How long were you in trouble for as far as the jaw and you were
23 doing paper work where - in the control room?
24
25

894 338

1 OLSON: Yes, each section was supposed to have certain procedures that they
2 were supposed to review. You know, you go through the procedures, and
3 through the prints and you know when it tells you to do a specific thing
4 with certain valve line up and that's to just verify my lineups were right
5 and if they were not, change the procedure.

6
7 HUNTER: When was the last time you received 40 hours of training? Requali-
8 fication training over _____ training?

9
10 OLSON: We went to six shifts the first of the year. We went through one
11 training week. Then the following training week we went to Lynchburg, so I
12 would say it was in January.

13
14 HUNTER: Okay, 40 hours of simulated training.

15
16 OLSON: Um hum.

17
18 HUNTER: Shows here that the um,

19
20 OLSON: 19th of March when we went down there.

21
22 HUNTER: 23rd of March? 1979? 40 hours?

23
24 OLSON: Um hum.

894 339

25

1 HUNTER: Okay how was your training? What was that?

2
3 OLSON: That was the first training week that we had in January. That was
4 the first 40 hour week of training for the year. They had condensate polishers,
5 and they had Cary Horner giving a lecture, and Kim Fredricks and I don't
6 remember what else they went over.

7
8 HUNTER: What about advanced health physics requal certification, have you
9 had that? The end of last year? Do you recall that?

10
11 OLSON: Yes seems we had something like that.

12
13 HUNTER: Would that be during a 40 hour period or would it be a extra
14 training?

15
16 OLSON: I don't think that was a 40 hour.

17
18 HUNTER: Part of the 40 hour. It shows here as 40 hours of training.

19
20 OLSON: I remember having it but I don't remember exactly when it was.

21
22 HUNTER: In the retraining program, requalification shows that you had
23 training on the technical specifications, do you recall that?

24
25 894 340

1 OLSON:

2
3 HUNTER: You got your license sometimes, probably last summer, in June

4
5 OLSON: I don't remember when that was.

6
7 HUNTER: Okay, what did you think of the B&W simulator training and you
8 recently came back in March?

9
10 OLSON: I think I picked up a good bit...

11
12 HUNTER: Were you down with Jim Floyd, is that who, or were you there
13 before that?

14
15 OLSON: No, I was

16
17 HUNTER: That was Vernon Smith's shift.

18
19 OLSON: I was down the week before then on that one with Gregg Hinson, Ed
20 Miller, Lynn Wright, Mark Hulman, George Kunder.

21
22 HUNTER: Could you for a moment elaborate on your understanding of the
23 small break LOCA emergency procedure, what it means to you, what you know
24 about it?

25
894 341

1 OLSON: Well, with the three high pressure injection pumps that they got,
2 and the way they are lined up with the suction split and discharge split,
3 if you should have an event where you have a small break, and you end up in
4 a high pressure injection situation, and one of the diesels fails to start
5 energizes the plus. One of the discharge cross connect valves that we used
6 to keep closed is now opened and there is only one that's closed. So the
7 primary operator, he goes down to that valve. Of course, he has to know
8 which diesel failed to start. The control room operator that is on switching
9 and tagging that day, he goes down to the affected 16 valve on that side
10 corrects it off his seat and everybody's supposed to be able to respond
11 with a certain time frame.

12
13 HUNTER: Minutes, hours.

14
15 OLSON: Two minutes for the CRO to get down to the 16 valve and crack it
16 off the seat, get on the head set For getting the discharge cross connect
17 valve open, I think that is five minutes I don't remember the number exactly.
18 And then the control room operator whose on the panel up there, he is on
19 the head set and he has got to tell the guy whether he has got to open the
20 valve more or close the valve more so we don't exceed the capacity of the
21 makeup pump. Then when it is running.

22
23 HUNTER: Have you been on the plant during a trip on Unit 2 during a loss
24 of feedwater or turbine trip for any reason resulting in a high pressure
25 reactor trip?

1 OLSON: The first ES Unit 2 ever had, I had the panel that day. I did not
2 have a license then.

3
4 HUNTER: But you were there under training with somebody.

5
6 OLSON: I had the desk. We weren't really on the line. We were hot then.
7 I think that was during hot functionals and we were doing ES surveillance.

8
9 HUNTER: Is that when they the power curve (or sure) relief valve failed to
10 open and blew the plant down?

11
12 OLSON: Yes, that was the one we went from 2100 lbs to 11 lbs in five
13 minutes and did not know the valve was open.

14
15 HUNTER: 1100 lbs?

16
17 OLSON: Yes.

18
19 HUNTER: Okay. Have you been involved in any other trips subsequent to
20 that?

21
22 OLSON: Yes I believe so. I don't remember exactly what the circumstances
23 were. I remember one night we were bringing the plant up and they had
24 tripped a couple of times previously during the day when they were bringing
25 it up and that was the night the feedwater reg valves were in hand and wide
open. But that time it went out on low pressure.

894 343

1 HUNTER: Okay let me ask you, the reactor trip procedures turbine procedures
2 says blam, blam, how if the relief valve is opened at the time the automatic
3 accident occurs, the reactor trip procedures indicates that you close the
4 letdown valve, start the second makeup pump, and open the five valve to
5 provide if necessary provide suction for that into charge water makeup
6 water in the plants and try to prevent the pressure drop and also make a
7 pressurizer level above the 80, inches, the heaters trip, okay, if you
8 described that activity and your there on a trip, how do you react to that
9 situation. Are you able to react to it very quickly and establish the
10 second makeup pump.

11
12 OLSON: Um hum. Yes.

13
14 HUNTER: Does it require you to go around behind the panel to open up the
15 five valve?

16
17 OLSON: No, that depends on which pump you start. If you start the C pump,
18 and you don't have five valve open, you are going to burn it up.

19
20 HUNTER: Okay. You have got to start the A pump if the B pump is running?

21
22 OLSON: A is normally lined up as the standby. C is lined up for high
23 pressure injection.

24 894 344
25

1 HUNTER: In this case, this particular event we are talking about B pump
2 putting it on the fellow stated the A pump, isolated the letdown and opened
3 the five, whichever valve goes to the A pump which he started. The C pump.
4 Unless you go around and open the five valve first.

5
6 OLSON: It will start.

7
8 HUNTER: Oh, I understand. How long will it last?

9
10 OLSON: About 3 seconds and then it's gone.

11
12 HUNTER: Okay, so you can't make that kind of mistake.

13
14 OLSON: No.

15
16 HUNTER: Okay, and what about pressurizer spray valves during that type of
17 transient? Do you

18
19 OLSON: Hopefully, it is closed.

20
21 HUNTER: Okay as the pressure and after a the turbine trip, the pressure in
22 the reactor goes up and the pressure then would you get the high pressure
23 relief valve but before that should get the spray valve operating in that
24 type of condition, would you put the spray valve in manual and then crank
25 it open and use it, to limit the pressure trip or have you seen that done?

1 HUNTER: Or would you -- is that the way you would handle that type of high
2 pressure transient?

3
4 OLSON: If I thought it was necessary I would do that. I wouldn't have any
5 qualms about putting it in the hand open and wide open. I would not leave
6 it open.

7
8 HUNTER: Then you would just have to get it back closed.

9
10 OLSON: Then you just have to close it again and pull the handle on it.
11 Well you don't even have to go to close, you just pull the handle and
12 automatically goes shut.

13
14 HUNTER: It is just a matter of doing it then, or that would be a depressur-
15 izing mechanism as long as the pumps were on?

16
17 OLSON: Okay.

18
19 HUNTER: In the case of the pressurizer heaters and the spray valve opera-
20 ting, that night they were in manual that morning because there was
21 about 60 gallon a minute leaking into the reactor coolant draining tank.
22 2000 gallons a shift being transferred around to maintain the boron concen-
23 tration of 1027 so the fellows apparently you had been on shift the previous
24 day on the 27th?

25
894 346

1 OLSON: No

2
3 HUNTER: 26th?

4
5 OLSON: No

6
7 HUNTER: 5th

8
9 OLSON: No

10
11 HUNTER: Four days off.

12
13 OLSON: Yup. And a week before that I was in Virginia.

14
15 HUNTER: Was the power fed relief valve or the

16
17 OLSON: When we had been operating that way for quite a while due to the
18 boron concentration.

19
20 HUNTER: Even before you went to training

21
22 OLSON: Concentrating in the pressurizer so we were using manual spray
23 turning all the heaters on so we were continually spraying the pressurizer.

24
25 894 347

1 HUNTER: The operator on that night indicated among his immediate actions
2 of course was to place the heaters and spray that to automatic to allow it
3 to form there function. Do you have any idea how can you recall how long
4 that had been going on? Well you are saying 4 days off plus a week in
5 Virginia and before that.

6
7 OLSON: I don't really want to give you a number.

8
9 HUNTER: I noticed looking at the leak rate for the plant the primary leak
10 rate had been up and being corrected for a substantial period of time to
11 take into account the reactor coolant drain tank as identified leakage.
12 They you having trouble with adding hydrogen to the makeup tank. Is that,
13 do you can you, give me a feel for that?

14
15 OLSON: That's, I don't know whether it was leaks at the manifold or exactly
16 where they were, but they were having a problem getting it in that is when
17 they put that temporary rig in down there at the room you just go down and
18 have a guy

19
20 HUNTER: Manually add hydrogen?

21
22 OLSON: Open a regulator on the bottle and we watched the pressure in the
23 control room call him and tell him to quit.

24
25 894 348

1 HUNTER: Were you aware that the rupture disk on the auxiliary sump pump
2 tank was blocked. Had that happened before you went to training?

3
4 OLSON: I don't remember hearing about that one.

5
6 HUNTER: Were -- the EF-12 A&B valves were closed during this transient
7 during this event and the Craig or reg valves had to open and he got them
8 open in 8 minutes after he discovered that they were closed and they were
9 not feeding and the 11 valves came open automatically at 30 inches on the
10 steam generator, have you been in the situation where you had the trip and
11 then been over watching the generator as the levels were being recovered?
12 Looking specifically at the operating of the EF-11 valves and how they
13 operate.

14
15 OLSON: Not that I can recall specifically, looking at how they control but
16 there have been times when we have tripped the pumps have started the
17 valves open and it did control level where it was supposed to.

18
19 HUNTER: The times that you have seen it had been normal?

20
21 OLSON: Yes.

22
23 HUNTER: Have you ever had problems with the 12 valves before that you are
24 aware of? Of being closed and not in proper position? Or the 5 valves?

1 OLSON: I did find them closed once I don't remember exactly what the plant
2 circumstances were whether we were heating up or just starting up or not.

3
4 HUNTER: My impression would be right now is that they should have been
5 opened because you remember that that was abnormal -- is that what you are
6 telling me? Do you have a feeling for that when that was, or just general
7 idea?

8
9 OLSON: No I don't have that.

10
11 HUNTER: Any of the other valves, have you ever found the 11 valves in
12 manual?

13
14 OLSON: No, I found EFV 4-A&B shut, 5-A&B shut, 12-A&B shut. The pumps in
15 sull to lock.

16
17 HUNTER: Would that be during the heat up or they would have in effect been
18 in that position during the prior to shutting down the second feed pump
19 they are in fact put in, you know, do you have to do something to the aux
20 feedwater system?

21
22 OLSON: I don't remember exactly what the conditions were. All I remember
23 is that they should have been opened.

24
25 894 350

1 HUNTER: Do you recall putting them in the normal position? How would you
2 and I find out when that was?

3
4 OLSON: I don't know because I didn't write it in the log book.

5
6 HUNTER: Did you notify anybody?

7
8 OLSON: My shift supervisor.

9
10 HUNTER: Who would that have been?

11
12 OLSON: Gregg Hess.

13
14 HUNTER: Gregg Hess. Okay.

15
16 HUNTER: Okay, Dennis if you have any comments, um,

17
18 FOSTER: Okay Dennis, thank you. The interview is concluded at 3:40 p.m.

19
20
21 894 351
22
23
24
25