

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

1 In the Matter of:

2 IE TMI INVESTIGATION INTERVIEW

3 of Douglas Earl Weaver, Jr.
4 Instrument and Control Foreman

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

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11
12 May 24, 1979

(Date of Interview)

13 July 4, 1979

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21 NRC PERSONNEL:

22 James S. Creswell
23 Anthony Fasano
24 Dale E. Donaldson
25 Mark E. Resner

2908090254

820 001

1 RESNER: The following interview is being conducted in Traylor 203, which
2 is located just outside of the South Gate to the Three Mile Facility.
3 Today's date is May 24, 1979 and the present time is 1:55 p.m. EDT. This
4 is an interview of Mr. Douglas Earl Weaver, Jr. Mr. Weaver is employed
5 with the Metropolitan Edison Company at the Three Mile Island Facility.
6 His job title is Instrument and Control Foreman. Individuals representing
7 the NRC present for this interview are Mr. James S. Creswell; Mr. Creswell
8 is the Reactor Inspector with Region III of the Nuclear Regulatory Commission.
9 Also present is Mr. Anthony Fasano; Mr. Fasano is an Inspection Specialist
10 assigned to Region I of the U.S. Nuclear Regulatory Commission. Also
11 present, Mr. Donald D. Donaldson; Mr. Donaldson is a Radiation Specialist
12 assigned to Region I of the U.S. Nuclear Regulatory Commission. Monitoring
13 this interview is Mark E. Resner. I am an Investigator of the Office of
14 Inspector and Auditor, Headquarters, U.S. Nuclear Regulatory Commission.
15 Prior to taping this interview, Mr. Weaver was presented with a two-page
16 document, which advised him of the purpose, the scope and the authority
17 with which the Nuclear Regulatory Commission was given by Congress to
18 conduct this investigation. In addition, we have apprised Mr. Weaver that
19 he is entitled to a representative of his choice to be present during the
20 interview should he want one, and also that in no way is he compelled to
21 talk with us should he not want to. Also, on the second page of this
22 document, there are three questions which Mr. Weaver has answered. I will
23 state them for the record. No. 1: Do you understand the above? Mr. Weaver
24 has checked yes; is that correct Mr. Weaver?

990 002

1 WEAVER: Yes.

2
3 RESNER: Question 2: Do we have your permission to tape this interview?
4 Mr. Weaver has checked yes. Is that correct?

5
6 WEAVER: Yes.

7
8 RESNER: Question 3: Do you want a copy of the tape? Mr. Weaver has
9 checked yes. Is that correct?

10
11 WEAVER: Yes, it is.

12
13 RESNER: Okay. We will provide you with a copy of the tape at the conclusion
14 of the interview. And now, if you would Mr. Weaver, briefly give a synopsis
15 of your educational and your job experience as related to the job that you
16 currently perform.

17
18 WEAVER: Alright. I was in the U.S. Navy for six years; Reactor Operator,
19 Electronic Technician, 2nd Class, upon discharge. I came to Met Ed, was
20 2nd Class I&C Technician for approximately 2 years; was promoted to an I&C
21 foreman, February 1974; worked Unit 1 for a startup program; took it through
22 the first refueling; then I was transferred to Unit 2 as the I&C foreman
23 down there for taking the Unit 2 through its startup and whatever.

24
25 890 003

1 RESNER: Alright, thank you very much, Mr. Weaver. At this time, Mr.
2 Creswell has some questions he would like to ask you.

3
4 CRESWELL: Mr. Weaver, could you tell us when you first learned of the
5 event that occurred on March 28, 1979?

6
7 WEAVER: Oh, about 10 to 5:00 in the morning.

8
9 CRESWELL: How did you learn of this?

10
11 WEAVER: I got a phone call from Kent Bryan asking me about pressurizer
12 level. They had a reactor trip and the pressurizer level wasn't indicating
13 exactly right; if I had any fee' or what could be wrong. I told them no,
14 not over the phone, I couldn't make any evaluation. I decided to come out,
15 look it over.

16
17 CRESWELL: You said that he didn't believe the pressurizer level was acting
18 exactly the way it should. Could you elaborate on what he described to
19 you?

20
21 WEAVER: All the instruments were reading full scale which either indicated
22 a malfunction, common to all three instruments, or a natural reading.

23
24 CRESWELL: Did you advise Mr. Bryan of certain things that he could check?
25

020 004

1 WEAVER: You go, you have your badge checked, your normal security checks
2 through a metal detector, a normal entering type procedure when you go to
3 work.

4
5 CRESWELL: Did you pick up a TLD at that time?

6
7 WEAVER: No. I don't think I did.

8
9 CRESWELL: So after you went through the processing center where did you
10 go?

11
12 WEAVER: I went over to the control room to see what was going

13
14 CRESWELL: Upon your entrance into the control room, approximately how many
15 people were in the control room?

16
17 WEAVER: There was about six.

18
19 CRESWELL: Could you name them?

20
21 WEAVER: I think so. Bill Zewe, Craig Faust, Ed Fredericks. Okay, I'm
22 pretty sure Mike Ross was in there when I, he was in there and George.
23 George Kunder might have come in later, I don't know. So it was five or
24 six. And Fred Schiemann was in and out at that time.

25
890 005

1 CRESWELL: Approximately, how long did that telephone conversation last?

2
3 WEAVER: Not very long, maybe thirty seconds, cause I was already aware of
4 the situation and I told him, thank you--goodbye.

5
6 CRESWELL: Then you got dressed?

7
8 WEAVER: Got dressed and came to work.

9
10 CRESWELL: What sort of conditions did you find when you arrived at the
11 security checkpoint? Did you come in the North Gate or the South Gate?

12
13 WEAVER: North Gate.

14
15 CRESWELL: Was it a normal situation at the gate when you came in?

16
17 WEAVER: Everything was normal.

18
19 CRESWELL: Okay. So you drove your car on in to the parking lot and parked
20 it and went in to the access center. Is that correct?

21
22 WEAVER: Yes. First processing center, I believe is what they call it.

23
24 CRESWELL: What happens whenever you get into the processing center.

25
890 006

1 WEAVER: I told him that I had the instrument people take voltage readings
2 that were on shift. I shouldn't say I did. I thought I did so why don't
3 we strike that comment because that conversation that early in the morning
4 I'm not to with it all.

5
6 CRESWELL: It's a possibility you may have asked him...

7
8 WEAVER: Normally I... My normal approach whenever I get a call, I ask them
9 what did my people on shift do already, have they taken readings, stuff
10 like that. That's just one of my normal reactions but I can't say I did.

11
12 CRESWELL: Okay. What happens then, after you get finished taking the
13 telephone call?

14
15 WEAVER: I got dressed and came in. Well no, I got a call about 10 after
16 5:00 where the control room operator from Unit 1, apparently unaware that I
17 was called by Ken; he was in the process of calling in all the other super-
18 visors that might be involved and telling them we had a trip to come out
19 and respond to whatever necessary to do to help out.

20
21 CRESWELL: Let's see. And did you name that control room operator?

22
23 WEAVER: No, I did not. I didn't catch the name. We have a lot of new
24 people; it was an actual operator.

25
890 007

1 CRESWELL: You said Mr. Bryan called you. Was he in the control room?

2
3 WEAVER: Not at that time. I think he was Reactor Unit 1.

4
5 CRESWELL: What did the control panel look like when you came into the
6 control room?

7
8 WEAVER: The items I looked at was only the control rods. I looked for a
9 full scram and the typical indication. When I come in, I look at items for
10 a technical area. The first thing, when I come into a control room, I look
11 at areas that I have to work on during a shutdown such as an outage. We
12 have an outage list. I did not look for plant conditions such as operations;
13 I looked at the control rod drives to see if I had any PI problems; I
14 looked at ...

15
16 CRESWELL: PI problems, would be position indications?

17
18 WEAVER: ... On the ... right! I look for my normal green lights, my
19 meters in the proper position, items like that. I walked over and looked
20 at the pressurizer level, did my comparison, took computer readings and the
21 recorder reading, that kind of stuff, to look for, if there was any problem
22 there.

23
24 CRESWELL: Did you personally address data from the computer regarding the
25 pressurizer level?

1 WEAVER: Yes.

2
3 CRESWELL: You called the data up?

4
5 WEAVER: Yes.

6
7 CRESWELL: Did you call any other data up from the computer, that you
8 recall?

9
10 WEAVER: No, I don't think ...

11
12 CRESWELL: Upon obtaining this information, you made a comparison between
13 what the computer was saying and what the instrumentation indicated. What
14 was the result of that comparison?

15
16 WEAVER: Then I looked at where all DP right from the computer and all 3 of
17 the channels without any temperature compensation were reading what I would
18 expect for the reading that I had on my recorder which was temperature
19 compensated plus the reverse DT. So everything looked like the transmitters
20 overall seeing the same signal or they had a ... common failure. So every-
21 thing was agreeing as far as the recomputer compared to the recorder.

22
23 CRESWELL: Did you report that to anyone?

24
25 000 009

1 WEAVER: Yes.

2
3 CRESWELL: Who did you talk to?

4
5 WEAVER: Bill Zewe and the control room operator. I can't remember which
6 one. That was reported that, hey, looks good to me.

7
8 CRESWELL: Okay. What did you do then?

9
10 WEAVER: Well, I went downstairs to look, to check for voltages, things like
11 that to be sure that there wasn't something obvious that I was missing. I
12 checked the 115s, things like that. We read right from the transmitters.
13 Just checked to see if there was anything that could effect all the readings.

14
15 CRESWELL: This was in the cable room?

16
17 WEAVER: Yes.

18
19 CRESWELL: And you would have checked by S Facts cabinets?

20
21 WEAVER: What?

22
23 CRESWELL: S--Safety Feature's Actuation Cabinet.

24
25 820 010

1 WEAVER: No. I just checked the pressurizer level. That was my concern at
2 the time.

3
4 CRESWELL: Could you tell us what particular, is it power supplies....

5
6 WEAVER: I checked the 115s volts to them and I checked their output to
7 make sure they had, the signal they transmit is -10 to +10, but I just
8 checked at the actual voltage they were putting out, reading what the
9 computer said and would correlate to what the recorder was saying at the
10 temperature corrections.

11
12 CRESWELL: Did you notice anything else abnormal while you were down in the
13 cable room?

14
15 WEAVER: No.

16
17 CRESWELL: Did you notice anybody down there in the cable room area at that
18 time?

19
20 WEAVER: No.

21
22 CRESWELL: So, after you made these checks in the cable room what happens
23 next?

24 000 011
25

1 WEAVER: I went up to the control room and they were busy, so I just stood
2 in the background to see, if they needed me they knew where I was.

3
4 CRESWELL: Did you report the information about the 115 volt power supply
5 to anyone?

6
7 WEAVER: I can't... I don't think I really did because if I would have
8 found something abnormal I would have bothered him, but since it was nothing
9 different..

10
11 CRESWELL: What was going on in the control room when you got back up from
12 the cable room?

13
14 WEAVER: They were doing there plant operations. They were running through.
15 They were looking at the steam generator levels and various things like
16 that. They were looking at reactor building pressure and doing plant
17 evolutions, which I don't feel I was qualified in ... I tried to stay in
18 the background.

19
20 CRESWELL: How many people were in the control room when you came back up?

21
22 WEAVER: I'm pretty sure that's when, I know for a fact, George and Mike
23 were both there.

24 820 012
25

1 CRESWELL: That's George Kunder and Mike Ross?

2
3 WEAVER: Yes.

4
5 FASANO: What time was this at this point?

6
7 WEAVER: It was around the 6:00 area.

8
9 CRESWELL: Okay, what happens next as far as your concerned?

10
11 WEAVER: Well that's when I was able to ask Bill what brought us down and
12 he said we lost condensate.

13
14 CRESWELL: This is Bill?

15
16 WEAVER: Zewe. And since there wasn't too much for me to do right at that
17 time, I said I going to go look around the plant. So I went down and went
18 to, now I might have my time frame messed up here, it might be closer to
19 6:30.

20
21 CRESWELL: These are approximate numbers, we understand that.

22
23 WEAVER: So I went down to the polisher panel and went inside the cabinet
24 and looked for water in the instrument lines, a problem that I saw before,
25 and there was water coming out of the common regulator to the whole control

1 panel. So I just made a peripheral walk of various other instruments in
2 that area to see how far the water got. It was in that whole area, all the
3 instrument lines had water out of them. So I, I can't remember if I went
4 back to the control room and told them what I found, or went right down to
5 the instrument air compressors and the source air compressors, and I did a
6 check down there. I started blowing down some of the air receivers and
7 seeing how much water was there, and by that time Bubba Marshall, who is an
8 aux engineer, I was working with him on a certain water problem from various
9 times, trying to track down how it gets in and proving where it comes from,
10 and that's when I called Bubba down and said, "Hey, Bubba, I've been blowing
11 down the tanks for 20 minutes and I'm still getting water out," and he came
12 down and he assisted me, and about that time Donny Miller came and we just
13 stayed there blowing down the water out of the air receivers.

14
15 CRESWELL: How long would you estimate it took you to blow that water down?

16
17 WEAVER: I never stayed for the whole blowdown. I can't say. In about
18 20 minutes I left. I left it to the operations group to worry about that.
19 I went back to the control room to see if there was anything else I could
20 do.

21
22 FASANO: This was about 7:00 then?

23
24 WEAVER: Yes.
25

000 014

1 FASANO: Alright. To pursue a little bit more on the condensate problem,
2 the condensate polisher, was this a problem that you had? I gather it's a
3 problem you've seen before. Did you come to any conclusions as to how the
4 water got there, how it got from the service and into the instrument air,
5 and how it, well do you have an answer now?

6
7 WEAVER: I feel the Company has come up with an answer now. I think they
8 did some verifications just this week. They had found a leaky check-valve.

9
10 FASANO: Is a check-valve in such a position where you can get from the, I
11 gather the service air to the instrument air?

12
13 WEAVER: The check-valve, if it was stuck open, would give you a path for
14 the water to go into the service air system and back through the instrument
15 air system. Yes.

16
17 FASANO: Where would the water come from, the water that you found on
18 March 28th? Do you have any idea on how it got there?

19
20 WEAVER: On March 28th I was guessing, because we never found anything
21 positive that the water was coming from fluffing air, because every time
22 they do that, the fluffing air evolution, well not every time... The other
23 times that this problem occurred they were doing the same problem with the
24 polishers, regeneration, transferring resins, where they were using transfer
25 pumps; and just by that information you assume it comes from the water they
used when they transfer resins.

1 FASANO: To go back. You did go back and check the condensate polisher
2 panel and you did find air when you walked in the door? I guess that's the
3 far door that you walk in and you tap it on that righthand side. Is that
4 where the controls are that you are talking about?

5
6 WEAVER: On the bottom, as you walk in the door, there is a, 2 Fisher
7 regulators, and in series one of them is a water moisture separator, which
8 had water in it.

9
10 FASANO: That's about 3 inches, this water separator?

11
12 WEAVER: Yes.

13
14 FASANO: And about 1 inch in diameter I'd say. Okay, did you check the
15 front panel to see what the status was?

16
17 WEAVER: No, I didn't.

18
19 FASANO: You did not?

20
21 WEAVER: No, I was concerned more about the water. The plant was already
22 down off the line. I'm not an operator; I don't feel qualified to do work
23 like that.

24 000 016
25

1 FASANO: When you do have water get in the line as it did, as it apparently
2 did, what happens to the inline valve and the outline valve on the polishers?

3
4 WEAVER: From experience, they go shut.

5
6 FASANO: This then would block water passage to the booster pumps, is that
7 correct?

8
9 WEAVER: Yes.

10
11 FASANO: So at this point, it appears that there was a fluffing action
12 going on before you got there, and water got into the service air line.
13 Now how could water get into the service air line?

14
15 WEAVER: I thought we just stated that.

16
17 CRESWELL: He mentioned a leaking check-valve.

18
19 FASANO: Yes, but that's in the air line. When they were doing the fluffing
20 the water coming into the; it's one of the vessels that you are going to...
21 Well is there a pressure difference between the air and the water?

22
23 WEAVER: Yes. 160 lbs water compared to 115 lbs service air.

24 000 017
25

1 FASANO: Then there had to be another valve opened at this point?

2
3 WEAVER: Yes.

4
5 FASANO: Do you know what valve that would be and where it would be?

6
7 WEAVER: No.

8
9 FASANO: This would be an operations evolution?

10
11 WEAVER: I'm not sure of their operations, of all the valves, the lineup to
12 transfer to high pressure water to remove resins. So I'm not qualified to
13 speak on that.

14
15 FASANO: That's okay. Okay, then, as far as the logic for the tripping of
16 the condensate pumps and the booster pumps, is it within your expertise to
17 talk of that?

18
19 WEAVER: Not at this time because I haven't sat back to look at them, I
20 would just be guessing.

21
22 FASANO: Okay.

23
24 CRESWELL: On your way down to the polisher panel, did you stop anywhere
25 else and check anything?

000 018

1 WEAVER: No.

2
3 CRESWELL: On your way back from the polisher panels or from the receiver
4 drain tank, did you stop anywhere else?

5
6 WEAVER: There's nothing really along the way that related to the incident
7 to check.

8
9 CRESWELL: Did you check anything else?

10
11 WEAVER: No.

12
13 CRESWELL: Then you went on back to the control room?

14
15 WEAVER: Yes.

16
17 CRESWELL: And what happens next. How many people are in the control room
18 when you get in there?

19
20 WEAVER: Now you have more people. That's when Ivan Porter came and we
21 talked about, I guess while I was down there, he was looking over a lot of
22 the instrumentation and he had some questions on some of the readings.

23
24 CRESWELL: What questions did he have?

25
000 019

1 WEAVER: Some of the in-core thermocouples weren't looking exactly what he
2 expected, on the computer itself. The T_H was high and we questioned that.

3
4 CRESWELL: So what did you do next?

5
6 WEAVER: We went down and put a thermocouple breeder on some of the ques-
7 tionable in-cores and took some readings to see if they agreed to the
8 values.

9
10 CRESWELL: What did you find on doing that?

11
12 WEAVER: I wasn't directly involved. Bob Gilbert and Skip Bennett, 2 other
13 foreman, came in by that time and they went down there and took the readings
14 and I believed they reported them to Ivan which he already testified that
15 he already had those readings.

16
17 CRESWELL: What are you doing in your spare time?

18
19 WEAVER: I think I had a couple of things going on. Item 1, we were getting
20 a couple of technicians to read the RTD, one of the T_H RTDs to see if we can
21 get a on-scale reading compared to, see where T_H was compared to TC and
22 various things like that. So we connected up a fluke DVM, and

23
24 CRESWELL: The DVM is the digital volt meter?

25
020 020

1 WEAVER: Digital volt meter with a resistance capacity, where if it was
2 accurate enough at the time to see where you were, where we just cross
3 reference that to a curve; and at the same time, my supervisor Dick Siglett
4 came in and we discussed what was going on and we talked, not realizing the
5 extent of how bad it was going to take, we just discussed the workload for
6 the rest of the day and things like that.

7
8 FASANO: What time did Sigletts come in?

9
10 WEAVER: He was there. I can't say when he came in, but I saw him around
11 7:00; but he was called out like myself. He went and did his own area.

12
13 CRESWELL: Did all of what you have told us so far occur before the site
14 emergency was declared?

15
16 WEAVER: I can't say. I heard a site emergency occurred someplace around
17 7:00-7:10, and right about then is when things starting getting... As
18 matter of fact, I probably talked to Dick between 6:00 and 7:00. I know it
19 was before a site emergency was declared.

20
21 CRESWELL: Dick?

22
23 WEAVER: Sigletts.

24
25
920 021

1 CRESWELL: What did you discuss with him?

2
3 WEAVER: We just, like I say, he's the Unit II supervisor of all main-
4 tenance. We discussed the shutdown and the workload for the day. At that
5 time, it just looked like normal outage.

6
7 FASANO: Then you reported to Sigletts when you first came in?

8
9 WEAVER: No I was there before him.

10
11 FASANO: Who did you report to?

12
13 WEAVER: Bill Zewe.

14
15 FASANO: And at what time was that when you got into the control room?

16
17 WEAVER: I would be guessing, but sometime between 5:30 and twenty of 6:00.

18
19 CRESWELL: What's the next thing that you recall happening?

20
21 WEAVER: Okay. At that time, since the other foremen were there, I let
22 them go off and worry about the thermocouple readings and worry about the
23 T_H readings, and I just tried to organize my daylight people coming on the
24 Island and get them into--there's an office right off the control room--get
25 maintenance people available for the jobs that were coming up. I called

1 over to Unit 1 and had all the Unit 1 I&C technicians sent over to Unit 2,
2 or they were sent over on their own, I can't remember which. Basically, we
3 just started organizing the personnel there to stand by and get ready for
4 anything that might occur.

5
6
7 CRESWELL: Okay. You made these calls to the I&C people in Unit 1, or they
8 had already come over?

9 WEAVER: Already came over. They were there in the room and I told them to
10 wait in the room until we gave them directions what to do.

11
12 CRESWELL: What happened whenever they got there?

13
14 WEAVER: They were in standby.

15
16 CRESWELL: What part of the control room were they in?

17
18 WEAVER: They were in a room to the side. It's where the HP people are
19 right now, presently using for an office.

20
21 CRESWELL: That would be next to the restroom there?

22
23 WEAVER: Yes.

24
25
800 023

1 CRESWELL: Okay. They are on standby, you're in the control room, what's
2 going on in the control room at this point?

3
4 WEAVER: That's when Gary and the other people I guess declared a site
5 emergency and they took control of all the evolutions. About that time, is
6 when they set up the, mustering in the emergency repair parties and people
7 getting the TLDs and masks, and basically everybody mustering that wasn't
8 involved in the site emergency.

9
10 CRESWELL: Okay. Are you a member of the Emergency Repair Team?

11
12 WEAVER: Normally the Emergency Repair Team is the shift people themselves,
13 but since I feel more qualified in Unit 2 I stayed and the other people ...,
14 I stayed as the I&C foreman representative.

15
16 CRESWELL: Okay. But who were you reporting to at this point?

17
18 WEAVER: At this time, there was a period of time when Dick Sigletts was
19 originally there with us and then Dan Shetland came in and took control as
20 the repair party senior man. It was either Dick Sigletts or Dan Shetland.

21
22 CRESWELL: What direction did you receive from either of these two people?

23
24 WEAVER: We stood by the control room waiting for a job and then after
25 everybody was alerted to don their face, their particulate masks, we went
on the turbine floor right outside the door to standby.

1 CRESWELL: How long did you stay out there?

2
3 WEAVER: I think it was 9:30, 10:00.

4
5 CRESWELL: What happens then?

6
7 WEAVER: About that time, I know it was Dan in charge at that time, and he
8 told us to go stand by Emergency ECS, which is over in the HP area of
9 Unit 1. We all went over there and we stood by there waiting for a dispatch
10 on our jobs.

11
12 FASANO: Did you get involved or did you hear about any problems with the
13 hot well level indication?

14
15 WEAVER: The pause is because I do remember something but I can't remember
16 exactly the problem. I can't remember if it was COV59. There was a valve
17 down there that they couldn't get opened and I told one of my I&C guys to
18 down and see what they could do. They found, I believe, a pressure switch
19 full of water and they jumped it out to get the valve opened.

20
21 FASANO: COV59?

22
23 WEAVER: Don't quote me about that. There was a valve they needed opened
24 and it had to do with a pressure switch which was full of water and they
25 jumped the pressure switch out to get it opened.

800 025

1 FASANO: Do you know what COV59 does? I mean, is this a ...

2
3 WEAVER: I shouldn't have even said that number. I need my flow prints to
4 get the numbering right.

5
6 FASANO: Okay. So you sent someone down to jumper your indication so that
7 the valve could be then opened?

8
9 WEAVER: Yes, sir.

10
11 FASANO: Alright now, do you, just jumping back a bit maybe before March 28,
12 do you recall where the atmospheric dump valve bellows ruptured, got steam
13 into the room I guess where some of the emergency feedwater, cabling gear
14 and motors exist?

15
16 WEAVER: Yes. I remember it well.

17
18 FASANO: You do. Was, did you know about the checks made on the connections
19 and the motors, are you involved?

20
21 WEAVER: Not on the motors themselves, no.

22
23 FASANO: Who would have done that?

24
25
000 026

1 WEAVER: That would be electrical department and construction. They were
2 doing some of the electrical type items there.

3
4 FASANO: Did you get involved in any of the checkout after that steam
5 released?

6
7 WEAVER: We were involved in the all the instrumentation and all the cabling
8 that had to do with instrumentation. We recalibrated all the instruments
9 that were in that room, functional checked them, did continuity checks,
10 ground checks on the cables that had to do with instrumentation.

11
12 FASANO: How long ago was this? Do you recall the date?

13
14 WEAVER: No, I don't but that's available. It's on record.

15
16 FASANO: Thank you.

17
18 CRESWELL: Did you make an entrance in the auxiliary building during the
19 time period we have already discussed?

20
21 WEAVER: Yes. I forgot about that.

22
23 CRESWELL: When did that happen?

24
25
890 027

1 WEAVER: I would probably say between 8:00 and 8:30.

2
3 CRESWELL: Why did you make the entrance?

4
5 WEAVER: Operations lost all ventilation in the aux building and they
6 wanted the ventilation back on and it had to do with a spurious alarm on
7 the fire detection system. The detectors are sensitive to moisture or just
8 particulate, and I want in to bypass a fire defeat switch to allow the fans
9 to start.

10
11 CRESWELL: What floor is this defeat switch located?

12
13 WEAVER: 305 level in the aux building.

14
15 CRESWELL: And approximately, how far did you have to penetrate in the
16 auxiliary building to do this?

17
18 WEAVER: 20-25 ft.

19
20 CRESWELL: The switch is located on a panel with other fire protection
21 equipment?

22
23 WEAVER: Yes, sir.

24
25
000 028

1 CRESWELL: I would assume that you noticed an alarm on the control board.

2
3 WEAVER: There was an alarm in the control room on the annunciator panel.

4
5 CRESWELL: Did someone direct you to go into the control room or into the
6 auxiliary building?

7
8 WEAVER: Yes, sir.

9
10 CRESWELL: Who was that?

11
12 WEAVER: They directed that the job get done, and I can't, I'm not going to
13 throw a name out but, because I can't remember exactly who it was.

14
15 CRESWELL: Would you be reporting to the emergency repair chief at that
16 time?

17
18 WEAVER: I would probably be... The request came from one of the shift
19 supervisors at the time. Somebody such as George Kunder or Mike Ross. I
20 can't say which at the time.

21
22 CRESWELL: So you went ahead and responded to that request.

23
24 WEAVER: Yes.

25
000 029

1 CRESWELL: No matter who it was. By nodding your head did you indicate
2 yes?

3
4 WEAVER: Yes.

5
6 CRESWELL: Did a health physicist go with you in the auxiliary building?

7
8 WEAVER: No.

9
10 CRESWELL: Was there a health physics checkpoint when you entered?

11
12 WEAVER: Yes, there was.

13
14 CRESWELL: Did you have your TLD with you at that time?

15
16 WEAVER: Yes.

17
18 CRESWELL: Did you have a dosimeter with you at that time?

19
20 WEAVER: Yes.

21
22 CRESWELL: Did you have contamination control clothing?

23
24 WEAVER: I was fully dressed up. I had a Scott airpack. I had a full set
25 of contamination clothes and I had a survey meter.

000 030

1 DONALDSON: Can I back up for a moment. Let's go back to you in the control
2 room with the declaration of the site emergency. Do you recall who made
3 that declaration or how you became aware of it?

4
5 WEAVER: No, I don't. The announcement was made and I'm not sure who
6 spoke.

7
8 DONALDSON: What is your normal response to the declaration of a site
9 emergency?

10
11 WEAVER: We have a control point to muster at, back where the emergency
12 repair party..

13
14 DONALDSON: O.K. And where would that be?

15
16 WEAVER: For Unit 2, it would be the roll up doors by the turbine building.

17
18 DONALDSON: The roll up doors by the turbine building? That would be the
19 ground floor?

20
21 WEAVER: Yes, sir.

22
23 DONALDSON: According to the response plan, the repair party would muster
24 in the emergency control station.

25
900 031

1 WEAVER: I said, I'm not designated emergency repair party.

2
3 DONALDSON: You were not simply because you were not shift maintenance, is
4 that correct?

5
6 WEAVER: That's right.

7
8 DONALDSON: So you formed a secondary group of people in the control room.

9
10 WEAVER: Yes.

11
12 DONALDSON: I think you did indicate that a repair party did form?

13
14 WEAVER: There was a repair party formed over in the normal ECS. But we
15 formed in the control room with my Unit 2 people who are aware of Unit 2.
16 They have the expertise in Unit 2. That's the people that stayed with me
17 in this incident. We did not muster down at the roll up door because I
18 needed those people for Unit 2 problems as they came up.

19
20 DONALDSON: In other words, your intent was that the Unit 2 people you would
21 keep as repair party people but keep them in the control room and not at
22 the control point where ...?

23
24 WEAVER: We were not in the control room. We were at the room to the side
25 and word was put out that I was going to keep my people here because I feel
our people are qualified technicians to respond to the emergencies.

1 DONALDSON: Are the shift people not qualified?

2
3 WEAVER: I didn't say that.

4
5 DONALDSON: Clarify than what you mean by your people are qualified.

6
7 WEAVER: What I'm saying is Unit 2 daylight workers I work with constantly
8 and they are more aware of my Unit 2 for ease of getting around. It is
9 just familiarity. And when I say we had Unit 2 shift people and Unit 2
10 daylight people and the shift people must go over there. I kept my daylight
11 people there because they have expertise in systems that shift people don't
12 have.

13
14 DONALDSON: Are there provisions for mustering the unit specific people in
15 the control room as opposed to the check point? Forming two repair party
16 teams.

17
18 WEAVER: No, I don't think there is

19
20 DONALDSON: Then early after the declaration of the site emergency, we
21 really have essentially two repair party teams formed, and one in the
22 normal ECS and you with your group of site specific people in the room off
23 to the side of the control room? Is that right?

24
25 000 033

1 WEAVER: Yes. We mustered and the names were called down to Security and
2 the people were accounted for.

3
4 DONALDSON: O.K. Now, from your past experience, the normal dispatch of
5 repair party people occurs from where?

6
7 WEAVER: Normal dispatch calls from the ECS over at Unit 1.

8
9 DONALDSON: O.K. I believe by the emergency plan a shift maintenance
10 foreman can be the head of the repair party. Is that correct?

11
12 WEAVER: That's right.

13
14 DONALDSON: The next person up the block, so to speak, is the supervisor of
15 maintenance?

16
17 WEAVER: That's correct.

18
19 DONALDSON: And above that, do you know who the Supervisor of Maintenance
20 is essentially coordinating with on the actions that his team is performing
21 in the normal organization?

22
23 WEAVER: I would have to look at the chart, but he, I think reports right
24 to the ECS coordinator on the phones.

25
800 034

1 DONALDSON: O.K. And the ECS coordinator is normally a health physics
2 individual, is it not?

3
4 WEAVER: Uh...

5
6 DONALDSON: Mr. Mulleavy or one of the HP foremen?

7
8 WEAVER: I don't care. You are just going to confuse me. I'm not going to
9 even try to attempt to answer these questions.

10
11 DONALDSON: O.K. Let's go back to after you had your people formed. I
12 believe you said you were taking directions from some of the shift operations
13 people. Dick Siglett took over and eventually Mr. Shawes showed up.

14
15 WEAVER: Mm Mm

16
17 DONALDSON: Can we try to go through and lets just take the morning up
18 until about noon, if we can. Now let's try to piece together the various
19 repair or corrective actions that your group of people might have performed
20 that morning.

21
22 WEAVER: O.K.

23
24 DONALDSON: All right. I believe you mentioned that your number 1 function
25 that you performed, or one of the functions, was you made an entry into the

1 auxiliary building to pass the fire defeat switch. And you mentioned that
2 you weren't sure who directed it but it was one of the shift operations
3 people .

4
5 WEAVER: Not thought. It would have been. We don't take direction from
6 anybody. It's a shift supervisor or his direct supervision.

7
8 DONALDSON: O.K. Again, I've got to go back to the normal emergency organi-
9 zation that you drilled and practiced in the past. If you were located in
10 the ECS, how would you get that direct.

11
12 WEAVER: It would come through the supervisor of maintenance who would be
13 at the ECS and say go do this.

14
15 DONALDSON: O.K. Alright. So you received that direction, now you said
16 there was an HP checkoint at the entry into the Unit 2 aux building?

17
18 WEAVER: Yes.

19
20 DONALDSON: And was an HP technician there?

21
22 WEAVER: There was two.

23
24 DONALDSON: Two. O.K. You don't recall who they were, do you?
25

1 WEAVER: No, I don't.

2
3 DONALDSON: Prior to your departure from the control room or prior to your
4 entry into the auxiliary building, were you briefed concerning health
5 physics procedures to be followed?

6
7 WEAVER: Yes.

8
9 DONALDSON: And who performed that briefing?

10
11 WEAVER: There a discussion with ... I can't remember.

12
13 DONALDSON: Would it have been... Do you know Dick Dubiel?

14
15 WEAVER: Dick Dubiel was there. I can't remember wh: I talked to.

16
17 DONALDSON: Was it a health physics individual?

18
19 WEAVER: I would have to, faces are running together. I can't comment. I
20 don't know.

21
22 DONALDSON: You wouldn't even know if it was health physics?

23
24 WEAVER: Yea, I would have to assume it was. You know, I just don't go
25 running off into a building without any confidence.

000 037

1 DONALDSON: That's what we want to establish.

2
3 WEAVER: Yea, I just can't. . . There was an HP supervisor in the building,
4 I know Dick Dubiel was there and there was other HP people present in the
5 control room. I would not go into an aux building that know that is contam-
6 inated without any type of forethought. I sat and I talked with people
7 before I do anything and I just can't remember who I talked to.

8
9 DONALDSON: O.K. You were requested to do this. Were you asked to volunteer
10 for it or were you just directed to do it?

11
12 WEAVER: They directed somebody for emergency repair party to do it. I
13 volunteered to do it because I feel I am probably more qualified in that
14 area because I do have nuclear background.

15
16 RESNER: At time we will change the tape. It is now 1:37 p.m., Eastern
17 Daylight Time. Correct that, 2:37.

18
19 RESNER: The present time is 1:39, excuse me, 2:39 p.m. This is a continu-
20 ation of the interview with Mr. Douglas Earl Weaver.

21
22 DONALDSON: O.K. Doug, we were talking about your first trip into the
23 auxiliary building and you mentioned that you thought that you were briefed
24 by one of the health physics staff. I assume the briefing took place in
25 the control room before you departed?

000 038

1 WEAVER: This whole period of time I had, I talked with Dick Dubiel on
2 various, just general information on what was happening, where the radiation
3 levels, just for my own information, just to keep posted, so if something
4 did happen I would have an idea what was going on. They requested that
5 somebody makes an entry into the aux building to jumper out the switch. I
6 wanted to go myself, mainly because I feel I have a lot of experience in
7 radiation and I was familiar with the aux building and I knew where the
8 switch was and I would rather I went in myself than a person maybe not as
9 experienced, with maybe just 6 years of nuclear training in other areas.

10 DONALDSON: O.K. Now in your discussion, and maybe you can't pin it down
11 this specific thing, but do you recall whether or not generally you were
12 aware of the dose rates and the radiological hazards in the area where you
13 were going?

14
15 WEAVER: We have... No. O.K, I remember doing things now that you just
16 sparked the whole thing. We went back and we tried to get a feel for
17 radiation level. That's right, Dick and me did go back and we reviewed the
18 area monitor panels, looking for the type of readings we could expect from
19 the Victoreen monitors. There is a monitor over in the one corner of the
20 aux building and that was one of the things we based our dose rates on, to
21 see what we could expect. But the whole time I went in I had a dose rate
22 meter with me and I had a teletector which I was monitoring the whole time
23 I was in there.

24 000 039
25

1 DONALDSON: O.K. So prior to entering the auxiliary building you checked
2 the area monitor panel and as best you could tried to ascertain what the
3 new levels were? O.K. Did Mr. Dubiel and yourself determine what protective
4 clothing you should wear?

5
6 WEAVER: I can't say it was Dick or who, but out of the whole thing we knew
7 how we had to dress, Scott airpack, and protective clothing and how to ...
8 where our control point was and everything like that.

9
10 DONALDSON: O.K. So you were dressed and you mentioned there were two
11 health physics technicians at a check point. Now, could you pin down for
12 me where your entry point was so that I can kind of visualize...

13
14 WEAVER: The check point was right at the double doors between what we call
15 the service building and the control tower.

16
17 DONALDSON: O.K. Fine. Approximately how long did it take to perform the
18 operation, to go in, jumper the switch and then come out?

19
20 WEAVER: Five minutes.

21
22 DONALDSON: Five minutes. O.K. Did you read your dosimeter when you came
23 out?
24
25

000 040

1 WEAVER: Yes, but I don't remember what it read.

2
3 DONALDSON: O.K. Nothing I mean it wasn't significant enough to jog your
4 memory? It wasn't off scale?

5
6 WEAVER: No, no it wasn't. I remember going through the double doors and
7 putting my teletector through the door first, and I saw levels, don't quote
8 me, around 100-150 mR.

9
10 DONALDSON: O.K. When you came out, what did you do then? Did you report,
11 did you frisk yourself and...

12
13 WEAVER: They took my TLD, my high range dosimeter, my low range dosimeter,
14 and I stepped off, they walked me down to another area where they were
15 sure, and they frisked me and I went back to the control room.

16
17 DONALDSON: You didn't have any contamination?

18
19 WEAVER: No. I was clean.

20
21 DONALDSON: O.K. Now the levels that you made... Did you report any of
22 those levels? I assume you performed a survey?

23
24 WEAVER: I went back and reported the survey I would have to say to Dick
25 what the level was as soon as I went in the door.

1 DONALDSON: O.K.
2

3 WEAVER: As soon as I went in the door it was 150, I took my 90 and I was
4 left with about 20 over by the fire panel.
5

6 DONALDSON: J.K. Now you mentioned that you were going into the fire, in
7 to jumper a fire control switch.
8

9 WEAVER: No. Not jumper. Just turn a switch from normal to defeat.
10

11 DONALDSON: Normal to defeat. You had not received the fire alarm, is that
12 correct, or had you?
13

14 WEAVER: The... It was a trouble alarm, I believe is what they got.
15

16 DONALDSON: And the trouble alarm would normally indicate what?
17

18 WEAVER: It can indicate numerous things, but in the past it has indicated
19 just water damage, type like that, particulates in the air.
20

21 CRESWELL: Did we determine where this fire alarm was coming from?
22

23 WEAVER: I can't remember any more.
24
25

890 042

1 CRESWELL: Was it in the reactor building?

2
3 WEAVER: No, it was in the aux building.

4
5 CRESWELL: It was in the aux building. Thank you.

6
7 DONALDSON: O.K. So one entry that you made, you were alone, I assume?

8
9 WEAVER: Yes.

10
11 DONALDSON: Was to pass this fire defeat switch. Do you recall any other
12 entries that yourself or any of your team members may have made?

13
14 WEAVER: Not that day, no.

15
16 DONALDSON: Not that day. O.K. Did you observe any other entries made by
17 operations people or other groups to perform any types of mechanical manipu-
18 lations or valve alignments or tours of any of the buildings? Did you
19 overhear any...

20
21 WEAVER: No. I did not.

22
23 DONALDSON: O.K. So on the morning, then, your repair party, your end of
24 the repair party performed one, essentially one function, one emergency
25 type repair?

900 043

1 WEAVER: Yes.

2
3 DONALDSON: Now I believe you said later that in that morning that you did
4 marry up with the group that was downstairs at the ECS.

5
6 WEAVER: Then the whole repair party merged together at the Unit 1 ECS and
7 at that time, because when they, around 12 o'clock is when they wanted to
8 minimize the people on the Island. And I and two technicians left the
9 Island and Barry Kalenevitch, which is another I&C foreman, shift type, he
10 stayed on the... as now the only repair supervisor onsite.

11
12 DONALDSON: O.K. Now you mentioned that you married up at the Unit 1 ECS.
13 That would be back down at the Unit 1 health physics and chemistry check
14 points.

15
16 WEAVER: Yes.

17
18 DONALDSON: Did this marrying up occur before or after the ECS evacuated
19 from the Unit 1 check point to the Unit 2 control room? Let me put it this
20 way. When the two parties married up, were there only maintenance and
21 repair people in the area or was the ECS still activated?

22
23 WEAVER: In Unit 1?

24
25
000 044

1 DONALDSON: In Unit 1.

2
3 WEAVER: The ECS was in full activation.

4
5 DONALDSON: O.K. Now, in Unit 1, you're not talking about. Was it in the
6 Unit 1 control room or in the Unit 1 HP and chem checkpoint.

7
8 WEAVER: I'm not sure where they really had the official ECS set up as far
9 as the management position, because they had the communications channels
10 set up between Unit 1, Unit 2 and the HP area. I'm not sure which was the
11 actual "turn all" to ECS. That would be up to the people running it.
12 We were just reporting to that area as a central location for all maintenance
13 people to report from.

14
15 DONALDSON: O.K. So in the morning then, eventually all the maintenance
16 made it down to the HC chem area.

17
18 WEAVER: Yes.

19
20 DONALDSON: O.K. Now to help you out a little bit. Maybe it will jog your
21 memory. The Unit 1 chem HP area was evacuated, I think approximately 8:45
22 9:00 in that area sometime, and they moved the ECS to the Unit 2 control
23 room. Did you see when your team was down there, did you see Mr. Mulleavy
24 or Fred Hewe or Pete Velez or any of the technicians?

25
000 045

1 WEAVER: Yes. I was down there about I know about 9:30, 10:00 and HP
2 technicians were there.

3
4 DONALDSON: They were still there at that time. O.K. Did you remain in
5 that area for the rest of the morning?

6
7 WEAVER: We remained there until around 12:30, when they told the rest of
8 us to go offsite and leave a skeleton crew.

9
10 DONALDSON: O.K. So for the better part of the morning after you made your
11 entry into the auxiliary building you remained at the Unit 1 chem HP check
12 point?

13
14 WEAVER: Yes.

15
16 DONALDSON: And you continued to see the ECS in operation at that location?

17
18 WEAVER: Yes.

19
20 DONALDSON: And you left the Island?

21
22 WEAVER: I'm not sure if it was called the ECS. They can move the ECS at
23 their discretion but there was people manning that location.

24
25 000 046

1 DONALDSON: O.K. Then you left the island approximately noon and Kalenevitch
2 remained and took over the repair party functions?
3

4 WEAVER: Mm huh.
5

6 DONALDSON: Good. And you went to the observation center.
7

8 WEAVER: Yes.
9

10 DONALDSON: What functions did you perform over there?
11

12 WEAVER: Just basically stand by for any questions that might be needed
13 from my area and assist in any other matters, labor, anything that had to
14 be done.
15

16 DONALDSON: Did you remain there then for the rest of your shift?
17

18 WEAVER: I remained there until 4:30, 5:00 that day, yes.
19

20 DONALDSON: O.K. Then the following day, which would be the 29th, did you
21 report on the Island or back to the observation center?
22

23 WEAVER: I reported to the observation center first and then I went on the
24 Island.
25

000 047

1 DONALDSON: And where did you report when you went on the Island?

2
3 WEAVER: The Unit 2 control room.

4
5 DONALDSON: And to whom did you report?

6
7 WEAVER: I... There were so many people there I can't single out one
8 person Jim Logan was there, and I'm not sure if Gary was still there.
9 This senior "management personnel" there, I would have reported to, to keep
10 them aware of where I was.

11
12 DONALDSON: O.K. Then on the second day when you did report back to the
13 Island? Were you at that time the senior maintenance supervisor?

14
15 WEAVER: I don't think so.

16
17 DONALDSON: You don't think so?

18
19 WEAVER: I think at the time the company sent up a senior management person
20 controlling maintenance functions from the observation center and Barry
21 Riddle, I believe was there and myself. I think Barry was designated the
22 senior maintenance foreman, supervisor, whatever you want to call it.

23
24 DONALDSON: Barry Riddle, is he the electrical foreman?

25
000 048

1 WEAVER: Electrical foreman.

2
3 DONALDSON: O.K. You mentioned that you thought that the observation
4 center had picked up.

5
6 WEAVER: I knew that they had on shift at that time senior maintenance
7 supervisors controlling maintenance functions from the observation center.

8
9 DONALDSON: O.K. By senior supervisors, would that be the supervisor of
10 maintenance and superintendent of maintenance, or would it be GPU people?

11
12 WEAVER: No, to be exact it was Dick Sieglitz who is the Unit 2 supervisor
13 of maintenance, Tom Hawkins which is the Unit 1 supervisor of maintenance,
14 Pete Snyder which is the I&C department supervisor and John McGarry which
15 is the mechanical station supervisor.

16
17 DONALDSON: O.K. So maintenance then from the second day, repair functions,
18 so on, are being controlled from the observation center?

19
20 WEAVER: Yes.

21
22 DONALDSON: Can you recall for me any functions or any entries that your
23 people made to perform any kinds of manipulations or functions on the
24 second day?
25

000 049

1 WEAVER: I should have my... To give exact days and times I would need my
2 log to state everything that we might have done because we did too much in
3 each day, we didn't do too much, I mean we did various evolutions and I
4 can't single out one day from the other as far as which I did when.

5
6 DONALDSON: In general, were the entries in the various areas being coordi-
7 nated with Dick Dubiel or someone else?

8
9 WEAVER: Yes. Dick was an active member in the control room when I was
10 there. He was very active because I know, I did go in the aux building that
11 day I believe, to run a hose for venting one of the various tanks they
12 needed vented and at that time Dick was actively involved with directing
13 the HP coordination unit.

14
15 DONALDSON: O.K. Do you recall where the hose was run from and where it
16 went?

17
18 WEAVER: Yes, I do.

19
20 DONALDSON: Would you tell me, please?

21
22 WEAVER: We went from 1485, I believe it is. The number ... it's basically
23 is the first, is the RMS monitor in the first room in the aux building
24 corridor, I believe it is 1485, I could be wrong, it could be 1486. We ran
25 it from there over to a pressure switch to relieve pressure from, I think
it was the bleed tanks, to the reactor building.

000 050

1 DONALDSON: O.K. So you were venting the bleed tanks?

2
3 WEAVER: I believe that was their intention, yes.

4
5 DONALDSON: O.K. From the bleed tanks into the containment?

6
7 WEAVER: Yes.

8
9 DONALDSON: Again, same basic question. Did you have health physics coverage
10 with you?

11
12 WEAVER: We had at the time one technician, myself, one man outside standing
13 by no HP man with me as such, but at the time they had surveys, plus we
14 used existing radiation monitors to see what levels we were at and we
15 carried HP equipment with us.

16
17 DONALDSON: O.K. Do you recall what the levels were in that area?

18
19 WEAVER: I would be able to get close enough as far as the area we were
20 working, I think we're talking a couple of hundred mR.

21
22 DONALDSON: O.K. Would you normally be authorized to work in an area with
23 those levels without the HP technician?

24
25 000 051

1 WEAVER: Yes.

2
3 DONALDSON: Was anyone writing RWP's or did you have specified dose limits?
4 Did anyone tell you what the maximum exposure?

5
6 WEAVER: Yes.

7
8 DONALDSON: What was the administrative limit that was set at this particular
9 time?

10
11 WEAVER: Dick told me I wasn't allowed to go over 1000.

12
13 DONALDSON: Over a thousand millirems?

14
15 WEAVER: Well, I am going to be very vague on this. I was given one limit
16 on the first day. I think I exceeded that by, it was a very conservative
17 limit.

18
19 DONALDSON: Do you recall what the limit was?

20
21 WEAVER: It wasn't the first day. It was the 29th, the second day. It was
22 a very conservative limit. It was 100, 150 and I exceeded that by maybe
23 15. If I get, if you don't want exact numbers... I think I can tell you
24 it was 150 and I got something like 165 the first day. So then I went back
25 in numerous times and they gave me up to 1000 to go in.

1 DONALDSON: O.K. A thousand on that entry, or...

2
3 WEAVER: No. 1000 total. I was to keep track of my total.

4
5 DONALDSON: O.K. So you were instructed to keep track of your own total
6 cumulative dose?

7
8 WEAVER: Plus we were, at the end of the day we had to go to the observation
9 center and report our levels to the observation center where they kept the
10 record.

11
12 DONALDSON: So you would keep your own record of your exposure?

13
14 WEAVER: I believe the first day, that's what we did, yes.

15
16 DONALDSON: And then the end of the day you would report to the observation
17 center and in turn report to them what your exposure for the day was?

18
19 WEAVER: I believe the first day that's the way we handled it.

20
21 DONALDSON: The first day, O.K. What did you base this on? The numbers
22 that you had.

23
24 WEAVER: My dosimeter.

25
000 053

1 DONALDSON: Did you, for people in your repair party, did you verify the
2 numbers that they had on their dosimeters?

3
4 WEAVER: Now we're getting into an area... One day I didn't believe my
5 reading and they read my TLD immediately. They were verified that way.
6 When you had questions of what you had it was immediate readings or if you
7 exceeded your limit, they read your TLD.

8
9 DONALDSON: O.K. So by the end of the first day they were able to read
10 your TLD's over at the observation center?

11
12 WEAVER: Wherever. I don't know where.

13
14 DONALDSON: O.K. So you did have an administrative limit for that second
15 day's entry? Like you said, you had about three or four people working on
16 that job with you?

17
18 WEAVER: I actually had one technician that went inside with me, and I had
19 a man standing by in case that we exceeded our limits of stay time. Dick
20 gave us stay time and if we exceeded that we had people ... hey, here is
21 what you gotta do, type thing.

22
23 DONALDSON: Did any one in your party exceed the administrative limit of
24 1000 millirem or exceed stay time?

25
800 054

1 WEAVER: Not to the best of my knowledge. I was surprised how quickly...
2 Well, we made a lot of preparations before running the hose and we did all
3 our up, at that day the 29th I moved my shop into that room to support
4 operations and we had a regular maintenance function set up in that room
5 where I told you most of the people stayed before and we did.. we prefabed,
6 we hydrode and did things like that there and then we just went in and did
7 installation type work.

8
9 DONALDSON: So you tried to preplan your work as much as possible to limit
10 stay times?

11
12 WEAVER: Yeah. We made the fittings up; we hydrode. You know, all that
13 stuff had to be done before you went in and that's why, my one reason for
14 the 28th of staying, I am more, my daylight people are more familiar with
15 the little bits of information that a shift worker might not be familiar
16 with what size tubing do you need to go in this fitting, and are more
17 involved in little details like that. That's why we were able to do a lot
18 of our jobs when we knew exactly what type of fittings you're going to be
19 dealing with, more so than a person that, they're as qualified as what we
20 call our daylight people, it is just that they have--their area is more
21 flexible. So we were able to plan our work and do the job in the quickest
22 time.

23
24 DONALDSON: Okay. On the second day, the 29th, other than this routing of
25 the tubing of the bleed tanks, did you perform any other functions, or were
you involved in the planning for any additional entries?

020 055

1 WEAVER: We did other, you have access to my work list. You've already
2 looked it over. The NRC did review it, so I assume your notes would probably
3 have things there that would spur my memory, because right now without my
4 worklog here, I can't give you everything we did. During that day, the
5 time frame that we are talking about, we did various functions outside the
6 controlled area, where we took readings for operations, recorded them just
7 to aid analyzing what was going on. At this time, B&W and people were
8 requesting readings.

9
10 DONALDSON: Okay. For entries inside the controlled areas, would you say
11 the same general procedures as you previously discussed.

12
13 WEAVER: From my department, I know they were all handled that way, mainly
14 because we set up, like I said, a maintenance function right outside the
15 control room to assure that we had a working log to pass on from shift to
16 shift. Also, to have spare parts and organize the stuff and know what you
17 have available. At this same time, if I'm not mistaken, Unit 1 people
18 assisted me by working out of Unit 1, and by phone call, say, "Hey, I need
19 500 ft of tubing. Could you get it for me?" and they would transport it
20 over. And keeping that stuff in a central location. All our I&C jobs were
21 done in that order for those three days, and the other jobs that we were
22 involved in I know about, I personally went in when I wasn't familiar with
23 it, and scoped out the job, see what fittings I would need, marked off how
24 many feet of hose, you know everything, the hand tools. Just to assure
25 that if anybody got a dose of radiation, it was me who was the supervisor,

1 compared to the other people, who didn't have, had to do the work for me.
2 I was able to minimize, go and do the supervisory work and get my exposure
3 and then to go in and say here's how I want you to do it. And then, how we
4 eventually worked out a big job when we ran lines and things that are
5 emergency conditions, we would lay it out, have a briefing. I would go
6 down there and I would be completely dressed, and the foreman would be
7 completely dressed, say here's what I want you to do. We'd go in there
8 show the guys--we want you to run from here to here--and they would see
9 everything. And then the supervisor would come out and go in on a periodic
10 thing or stay there to support them with anything else they'd need. To
11 send people in and out, when you see their air tanks running out, you send
12 another person in to continue the job.

13
14 DONALDSON: Okay. You mention that those were the procedures that you
15 followed with I&C crew. Were there parallel crews working with other kinds
16 of maintenance?

17
18 WEAVER: There was a mechanical department that was doing a job with me; we
19 were running another line, and they basically operated in the same format I
20 did.

21
22 DONALDSON: Okay, in addition, were the mechanical department people, and
23 electrical and so on and so forth, running their own specific functions at
24 this time also?
25

900 057

1 WEAVER: The mechanic, ... the I&C Department is the only people, that send
2 a crew of people onsite to be ready and available. The mechanics and
3 electricians were dispatched as jobs came up.
4

5 DONALDSON: Okay, so the I&C essentially had the lead for repair party
6 functions?
7

8 WEAVER: The I&C didn't have the lead, but the I&C is involved in things
9 that are not repair party type jobs, where you need a person to take a
10 voltage reading for people that are analyzing what's going on for instrumen-
11 tation. Mechanics and electricians, they're more of repair type things,
12 the motor doesn't work and you got come in and replace the motor. But a
13 person will come to me, I need a recorder, a heater; I need a voltage
14 reading over here; I need something looked at. You need people available
15 to support instantaneous type jobs.
16

17 DONALDSON: Then you say you perceive yourself to be more or less a repair
18 party support team?
19

20 WEAVER: I'm not sure. Maybe you don't understand what I'm trying to say
21 or maybe I'm not understanding. We're not only a repair party; we were
22 there also to help the people that had to collect information-- that used
23 digital volt meters--things the engineering staff needs. There was, at
24 this time, supervisions here, engineering people here that needed information,
25 say, "hey, what's going on? Could you take readings for us?" You can't

800 058

1 call over to the observation center and say, we need a volt meter reading
2 here, or how does this work? You need a person there that can answer those
3 questions.

4
5 DONALDSON: So you were sort of like advisory to a number of people?

6
7 WEAVER: We assisted a number of people.

8
9 DONALDSON: And then, when necessary, you actually performed repair party
10 functions?

11
12 WEAVER: When necessary, we performed them.

13
14 DONALDSON: Okay. That makes it clear. Before I drop back and talk about
15 something beforehand, do you want to discuss Tony, any specific work items?

16
17 FASANO: Well, yeah, I liked to maybe get some background information. Are
18 you familiar with the dipping bird?

19
20 WEAVER: (laughter) Sure.

21
22 FASANO: What is the dipping bird?

23
24 WEAVER: It's a highly technical name for the CO leak-off on the RC pumps.
25

000 059

1 FASANO: Okay. Was there a problem with these prior to March 28th, do you
2 know?

3
4 WEAVER: Such as.

5
6 FASANO: For, well, so that one could evaluate the actual inventory of
7 leakage say from the primary system. Was information available so that one
8 could make a determination to the inventory leakage in the control of
9 environment of the reactor building.

10
11 WEAVER: I would have to go back and look at my worklog. But I know on one
12 of my outage items, one of the birds were actually stuck in the dip position,
13 and all the other three were functional.

14
15 FASANO: Based on your experience, what can cause one of these mechanisms
16 to stick in the down position?

17
18 WEAVER: It's a very simple mechanical type device and just normal type of
19 the environment that it's in, could cause a little bit of rust on the pivot
20 points. The way the unit is set up, you tighten down on the pivot points
21 until it dips freely and accurately, and any type of, well I shouldn't say
22 dust, but moisture content or anything could just cause it to set up balance
23 type system, throw it out of balance.

24 890 060
25

1 FASANO: In the down position then, you could have leakage and it just
2 would fall out and you don't record it.

3
4 WEAVER: (indicates yes)

5
6 FASANO: Would anyone be able to estimate an error or have anyway of knowing
7 what leakage is coming off on that particular...

8
9 WEAVER: Not from the dipping bird, itself, but I'm sure B&W people have a
10 better feel of that area than I do.

11
12 FASANO: How about the electromatic relief valve? Are you familiar with
13 that piece of equipment and do you get involved in evaluating the circuitry
14 or the readout in particular?

15
16 WEAVER: I'm familiar with it and I probably should be more familiar with
17 it than I am, because our department handles the indication and I'm familiar
18 with the circuit but I didn't get involved in any of the repairs on it, so
19 I can't comment too much on it.

20
21 FASANO: Were you involved in the modification, where the, I guess the
22 logic was changed and also the indication light was rerouted to give a
23 specific indication as the power goes through the solenoid?

24
25 000 061

1 WEAVER: I'm aware of the change but I was not personally involved.

2
3 FASANO: Were you here during the preop?

4
5 WEAVER: Yes, I was.

6
7 FASANO: Do you have any knowledge of the electromatic relief valve since
8 it has been installed? Was it the original one for Unit 2?

9
10 WEAVER: I cannot. It would be completely out of my area.

11
12 FASANO: Okay, fine. On the leak... If there's indication for leakage....

13
14 RESNER: Could we take a break right now? We have a nature call. Okay,
15 the time now is 2:07..

16
17 DONALDSON: 3:07.

18
19 RESNER: 3:07. Thank you Mr. Donaldson, p.m., and we'll break.

20
21 RESNER: The time now is 3:11p.m. and our interviewee is back.

22
23 FASANO: What I would like to know is--there's a leak on the electromatic
24 valve and also on the code safety valves. Is there a way of really deter-
25 mining remotely separation between the three valves, and do you get involved
in this area?

000 062

1 WEAVER: We have a temperature detector on the pipes themselves, which will
2 tell you pipe temperature, which will tell you excess leakage just due to
3 heating.

4
5 FASANO: Can you tell from, can you really tell which one is the predominant
6 leaker?

7
8 WEAVER: I would not be able to comment on that.

9
10 FASANO: Have you ever looked at it?

11
12 WEAVER: No.

13
14 FASANO: Okay. Who would be the people or person that really knows...

15
16 WEAVER: I would just have to guess when you have a leak light, if you feel
17 you have a leak, you have somebody from engineering or somebody from opera-
18 tions looking at that.

19
20 FASANO: So it would be really evaluated by engineering or an operations
21 man?

22
23 WEAVER: Yes.

000 063

24
25

1 FASANO: And if there were an instrumentation problem, you would get involved?
2

3 WEAVER: If they were concerned, if something wasn't right, the question of
4 calibration or the reliability of something, they might ask me my opinion.
5

6 _____: Okay. I guess there is only one other question. Did you...say
7 on the first day or the second day, I doubt if it were the first day cause
8 you had left by about 12:00, I gather? But do you recall, I have a chart
9 here, which SEA...
10

11 WEAVER: I did not look at that chart at all.
12

13 FASANO: You did not look at that chart?
14

15 WEAVER: I did not look at the reactor building pressure chart, itself.
16

17 FASANO: The second day either?
18

19 WEAVER: No.
20

21 FASANO: Have you seen a xeroxed copy of this?
22

23 WEAVER: Just the one you just showed me.
24
25

000 064

1 DONALDSON: Just back up real quick. The lines you ran in from the bleed
2 tanks, of the containment, you mentioned plastic, I think.

3
4 WEAVER: No, it wasn't plastic. It was a high pressure airline. The type
5 that you would use for a grinder, that type of hard rubber, two-ply reinforced.

6
7 DONALDSON: You're sure?

8
9 WEAVER: Oh, I'm positive of that.

10
11 DONALDSON: Okay. We heard that maybe it was stainless steel; somebody
12 else said it was possibly something else.

13
14 WEAVER: Well you had, the line was replaced.

15
16 DONALDSON: Oh, you mean the one that you had originally installed?

17
18 WEAVER: Yes, it was replaced three times. They went from the hard rubber
19 to soft-rolled copper to hard copper.

20
21 DONALDSON: About how far apart did these changes take place?

22
23 WEAVER: That went throughout, from the first day, the second day, I'm
24 sorry, to about a week. That was a continuous problem--job type.

25
000 065

1 DONALDSON: Now were you aware of or were you involved in another line
2 installation on the makeup tanks?

3
4 WEAVER: Yes.

5
6 DONALDSON: Okay, and that line ran from the makeup tanks to where?

7
8 WEAVER: The initial line ran from a sample line off the makeup tank to
9 another penetration in the reactor building.

10
11 DONALDSON: Okay. When did that first hookup start? Was it before the
12 emergency, during the early morning? When did that hookup take place?

13
14 WEAVER: That was on the second day when we actually ran that line.

15
16 DONALDSON: Okay. So that was ...

17
18 WEAVER: It was not during the first day. No.

19
20 DONALDSON: You're certain?

21
22 WEAVER: I'm positive. It was the second day. All those lines were run
23 after the initial emergency was over. The initial emergency was declared,
24 the second day we came back and when we had the other jobs.

25
000 066

1 DONALDSON: Okay. Then other than your preliminary work on the polishers...

2
3 WEAVER: Very little maintenance was done the first day.

4
5 DONALDSON: Okay. Good. Just back up now in terms of the emergency plan
6 training. Do you recall whether or not you had attended any instruction on
7 repair party team functions--recently, within the last year, in 1978 anytime
8 or 1979?

9
10 WEAVER: We have our general employee training once a year. And we also
11 had our site drill. I can't.... It was not long ago; I can't remember when
12 we did have that.

13
14 DONALDSON: But you don't recall having attended a class for a repair party
15 team under the Emergency Plan Training Program?

16
17 WEAVER: No.

18
19 DONALDSON: Did you instruct or give any classes in that particular area--
20 emergency repair party functions?

21
22 WEAVER: Such as when. Are you talking about...

23
24 DONALDSON: Anytime during 1978 or 1979.

25
800 067

1 WEAVER: No I did not give any

2
3 DONALDSON: Mr. Sheldon hadn't talked to you and said we have to train our
4 maintenance people, and I would like you to conduct the training of your
5 people in these areas, and give you either a list of areas to train or give
6 you some kind of an oral guide?

7
8 WEAVER: Not myself, no.

9
10 DONALDSON: Okay. Now going back... you say you mentioned site drills. I
11 wonder if you could kind of compare and contrast the way that the repair
12 party function went during the actual event with the way you'd run it or
13 the way it was conducted during drills. Would you say it was the same or
14 it was different? If it was different, how different?

15
16 WEAVER: I would say that the actual emergency was, well, it's hard to say,
17 because when you have a drill you always have a time frame that you want to
18 get the drill done with and you go and you say you have a leak here, and
19 they send you in the aux building to repair a leak, and everything is
20 always in abbreviated form. Now, I would say we did everything on emergency
21 type procedure, but it wasn't the abbreviation, where during the drill, you
22 will sit down, you would simulate briefing the people, how you would do it.
23 During the emergency we actually sat down and talked about the job. We
24 actually did the testing and the things like that. We planned our mainten-
25 ance before we went in and did our work. So, if you would take a drill and

1 drag a drill out for a 10-12 hr period and show everything that you would
2 have to contend with, I would say we did it the same as the training that
3 we had. But, you can't correlate them because a drill is a drill and this
4 was action.

5
6 DONALDSON: Well, I don't think I have any more questions. Tony, do you
7 have any?

8
9 FASANO: One quick one. I found this in their FSAR. I wondered if we do
10 indeed have thermocouples in here. This is called a vent valve thermocouple
11 nozzle.... it would be interesting, you know, you were here during the
12 preop I guess, and if indeed there was a thermocouple.

13
14 WEAVER: I was here from preop, but I never looked at that.

15
16 FASANO: It would be interesting if we really had one in there, it would be
17 in a good location, but apparently you don't have any knowledge of that?

18
19 WEAVER: No, I don't.

20
21 FASANO: Okay.

22
23 WEAVER: One thing, during the middle of this interview, I sort of, you
24 know, I lot of questions were asked that made us look like we didn't give
25 any forethought on some of the things. I want to put on record that things

1 we did, and when we went into areas, even though I myself can't remember
2 all the people we spoke with, but there was a lot of conversation going on
3 back and forth between all the people involved and before we actually did a
4 function, and especially defeating that switch and talking about going in
5 and taking the radiation levels. People there, we did look at a lot of
6 things, and even though the names can't be recalled, a lot of conversation
7 was going back and forth even though it wasn't on record where I felt
8 assured when I went into that building I knew what I was to expect and and
9 how they were going to handle the situation.

10
11 RESNER: Okay, duly noted. If you gentlemen have no further questions, I
12 wonder if for the record, Mr. Weaver, if you have any recommendations or
13 observations specific to your area that you want to share with us?

14
15 WEAVER: I have nothing I didn't say in this interview.

16
17 RESNER: Alright then, I appreciate the time in your coming over here and
18 that concludes this interview and the time now is 3:22p.m., EDT.

19
20 000 070
21
22
23
24
25