

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

1 In the Matter of:

2 IE TMI INVESTIGATION INTERVIEW

3 of Donald R. Miller, Auxiliary Operator A  
4  
5  
6  
7  
8

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

13 5/21/79

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18 (Tape Number(s))  
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21

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22 NRC PERSONNEL:  
23 Mark Resner  
24 Anthony Fasano  
25

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1        RESNER: This is an interview with Mr. Donald R. Miller. Mr. Miller is  
2 employed with the Metropolitan Edison Company at the Three Mile Island  
3 Facility, and his job title is Auxiliary Operator A. Present time is  
4 3:15 p.m. eastern daylight time. Today's date is May 21, 1979. This  
5 interview is being conducted in trailer 203 which is located just outside  
6 of the south gate, Three Mile Island Facility. Individuals representing  
7 the NRC, present at this interview are Mr. Anthony Fasano. Mr. Fasano  
8 is an inspection specialist, Region I, U. S. Nuclear Regulatory Commission.  
9 Presently speaking, moderating this interview is Marc E. Resner. I am  
10 an investigator with the Office of Inspector and Auditor, Headquarters,  
11 of the U. S. Nuclear Regulatory Commission. Prior to taping this inter-  
12 view Mr. Miller was given a two page document, which explains the purpose,  
13 the scope, the authority which the Nuclear Regulatory Commission has  
14 been given to conduct this investigation. In addition to this document  
15 I apprised Mr. Miller that he was entitled to a representative of his  
16 choice to be present at this interview should he desire one. Also, I  
17 apprised Mr. Miller of the fact that in no way is he compelled to talk  
18 to us during this interview should he not want to. On the second page  
19 of the document, there are three questions which Mr. Miller has answered.  
20 I will state these for the record. Question No. 1, Do you understand  
21 the above? Mr. Miller has checked "Yes". Is that correct, Mr. Miller?

22  
23  
24  
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1 MILLER: Yes.

2  
3 RESNER: Question 2, Do we have your permission to tape the interview?  
4 Mr. Miller has checked "Yes". Is that correct MR. Miller?  
5

6 MILLER: Yes.

7  
8 RESNER: Question 3, Do you want a copy of the tape? Mr. Miller has  
9 checked "Yes". Is that correct?  
10

11 MILLER: Yes.

12  
13 RESNER: Alright. We will provide you with a copy of the tape at the  
14 conclusion of this interview.  
15

16 RESNER: Now for the record, and for those who'll be listening to the  
17 tape in the future, Mr. Miller I'll ask you to provide us with a brief  
18 synopsis of your educational experience and job experience as related to  
19 the nuclear industry.  
20

21 MILLER: Well I've got high school education in which I had a real good  
22 background in high school in the Mathematical field and physics field  
23 which was what Met Ed had required at the time, when I got the job, when  
24 I applied for the job here on the island. And I've worked for Metropol-  
25

1 itan Edison from 1970, March of that year, and in 1976, in October, I  
2 bid the auxiliary operator, auxiliary operator job here on the island  
3 and took a math test and those tests and they deemed me qualified in  
4 that respect and then I went through schooling here on the island for a  
5 nine-week schooling on the secondary side of the plant, and three weeks  
6 of on-the-job training and took a final written exam issued to me by  
7 Metropolitan Edison. And past that written exam and a walk-around by  
8 the instructors from Metropolitan Edison and then in one years time  
9 after that, took another written test on the secondary side of the plant  
10 and a walk-around by my shift supervisor and they deemed me qualified as  
11 would have been the C operator program. And after that one year, we  
12 went to the B operator program which we had six weeks of schooling on  
13 the primary systems and took a written test and walk-around from shift  
14 supervisors and the test from the training department here on the island  
15 from Metropolitan Edison. And then one year after that took another  
16 test and walk-around from shift supervisor and became qualified as an  
17 auxiliary A with Metropolitan Edison.

18  
19 RESNER: Okay, what thank you very much. At this time Mr. Fasano has  
20 some questions that he would like to ask you.

21  
22 FASANO: Don, what we would like to do is get information about the  
23 event on March 28, 1979. I understand you were on shift work at that  
24 time and what I'd like to know from you, if you can, the sequence, if  
25

1 possible, the time sequence, what you remember happening at that time  
2 just prior to the occurrence say maybe an hour or two and then following.  
3

4 MILLER: Well the whole evening of the accident, from the time I came on  
5 shift at 11:00 I was working at the condensate polishing system. We had  
6 resins clogged in the resin transfer lines between the vessel and what  
7 we call the regeneration tank on the condensate polishing system, where  
8 we transfer them over there to regenerate resins. I was working on that  
9 the whole evening.  
10

11 FASANO: The vessel you mean the, of the condensate polishing system?  
12

13 MILLER: Yes.  
14

15 FASANO: Now that was just before, that was before 4:00?  
16

17 MILLER: Up till 4:00, yes. I was there at the time of the trip.  
18

19 FASANO: Okay, at the, how did you know there was a trip?  
20

21 MILLER: Well when you work in the basement of the turbine building,  
22 there is a lot of pumps, motors and so on running and when the turbine  
23 trips everything gets quiet. You know all the pumps stop running and  
24 you no longer need your ear protection. So it is definitely quite  
25 clear.

1 FASANO: All pumps stop?  
2

3 MILLER: All pumps stop in the immediate area. They really, they did  
4 here. The feedwater pumps tripped. The condensate pump had tripped but  
5 the booster pump did continue to run, but it just got that much quieter.  
6

7 FASANO: Okay. Did, your memory now, the first pump that you realized  
8 had stopped was the ... which, the feedwater?  
9

10 MILLER: Condensate pump ...  
11

12 FASANO: That's located probably to your, from facing the board, behind  
13 you?  
14

15 MILLER: It would be behind and to the right.  
16

17 FASANO: Did you notice any valve change on the condensate polishers?  
18

19 MILLER: At that, the direct time of the trip, no. Within the first two  
20 to three minutes afterwards, yes, I noticed that my air operated valves  
21 on the polisher, the inlets and outlet valves, had failed shut.  
22  
23  
24  
25

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1 FASANO: How long after the fact?  
2

3 MILLER: I'd say within two to three m'utes.  
4

5 FASANO: Two to three minutes?  
6

7 MILLER: Beause I left where I was. There are electrical overrides on  
8 all those valves so they will not fail shut electrically. And when the  
9 plant tripped, I had to close, you know, close them outlet valves and  
10 the inlet valves to all but two polishers just to get it ready to come  
11 back up on the line. And I was opening those electrical overrides and  
12 then came back to the panel and that's when I noticed those valves were  
13 failed shut.  
14

15 FASANO: The, okay, so you did notice that they had closed, failed shut?  
16 To your memory you was this prior to the condensate pump stop, or was it  
17 prior?  
18

19 MILLER: I cannot really say. Because at the exact time of the trip I  
20 was behind the panel and had no real way of, you know, being able to be  
21 there at the exact time of the trip.  
22

23 895 223  
24  
25

1 FASANO: Were you there alone?

2  
3 MILLER: No, Fred Scheimann was with me, the shift foreman.

4  
5 FASANO: Is he your immediate supervisor.

6  
7 MILLER: Yes.

8  
9 RESNER: How do you spell Mr. Scheimann for the records? You know how  
10 to spell it?

11  
12 MILLER: I believe it's S-C-H-I-E-M-A-N.

13  
14 RESNER: Thank you.

15  
16 FASANO: The work you were doing on it on the condensate polishing  
17 system, you said you were .... unclogging resin? How do you do this?

18  
19 MILLER: There is what we call fluffing air valve that is located under  
20 the vessel that you'll cut in and cut out, cut in and cut out, to try  
21 and free the resin up. At the same time you're trying to push resin  
22 through with steam and water pressure.

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24 895 224

25



1 FASANO: So you're using water pressure, like to move, and air to fluff?  
2

3 MILLER: Yes.  
4

5 FASANO: Is there any precaution in this evolution? Is there a possi-  
6 bility of getting water into your air lines which could feed back to the  
7 other seven tanks?  
8

9 MILLER: It would not feed back to the other seven tanks. But, now  
10 since the accident, I've found out that there are two check valves in  
11 that service air line that haven't been seating totally properly, and  
12 they have ... water gotten back into the air resevoirs in the past and  
13 had tripped the condensate polishing system.  
14

15 FASANO: The way you understand this system is if you loose air or  
16 electrical the valves will either fail open or as is, is that correct?  
17

18 MILLER: No. They fail shut.  
19

20 FASANO: If you loose electrical or air?  
21

22 MILLER: Yes. Now they do have electrical overrides on them, and then  
23 we put those into the open position, so if we would loose electrical  
24 power that they will stay open on loss of electrical power.  
25

1 FASANO: That means that loss of air you ...?  
2

3 MILLER: They fail shut. On a previous interview with GPU, I had stated  
4 to them too that, since the accident, I feel now that those valves  
5 should be "fail as is" to prevent us from losing flow possibly that way  
6 again. Although after talking to some of the control operators and so  
7 on they don't think that would have given us sufficient flow through  
8 there anyway because, you know we have lost the feed pumps. And we lose  
9 the feed pumps on a turbine trip or, and reactor trip  
10

11 FASANO: The condensate pump ... the condensate pump is the first to go,  
12 right?  
13

14 MILLER: Yes. According to, that is what I can remember because of the  
15 check valve on there and when they close they swing pretty hard and you  
16 can distinct that noise. And that is also confirmed by the computer  
17 printouts.  
18

19 FASANO: Then let's go back now, you had heard the clang and the conden-  
20 sate pumps, as far as you knew, had stopped? Now what was the next ...  
21 did you hear on the announcer? How did you know there was a turbine  
22 trip and a ... ?  
23  
24  
25

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1 MILLER: Like I said I knew the turbine tripped because you know the  
2 noise levels in the plant changed. But within 15 seconds from the time  
3 I noticed it there was an announcement over the page that we had a  
4 turbine trip and at the same time they said there was also a reactor  
5 trip.

6  
7 FASANO: Okay. Now what do you do now that you have confirmation that  
8 the ... the having turbine trip and the reactor trip? What do you do  
9 with your system that you are in charge of? Do you ...?

10  
11 MILLER: Well working with the condensate polishing system, I had ex-  
12 plained to you about the electrical override on the outlet valves. So I  
13 went down along \_\_\_\_\_ the vessels themselves, on their control  
14 panels, and physically put those back in the auto position. That gave  
15 me control to go to the panel board and close the valves on all but two  
16 of the polishing units.

17  
18 FASANO: Okay. But you said all valves had gone closed did you ... does  
19 that mean that you, on two of the units, you opened and put them in  
20 their proper open, open position, or ...?

21  
22 MILLER: I tried to but they would not open directly. While I was there  
23 at that present time they hadn't opened it. Later on during the evening  
24 and I'm not sure exactly what time, but they had gone back to the open  
25 position.

1 FASANO: So when you left at that time you really weren't lined up to  
2 use the polishers?  
3

4 MILLER: That's true. Yes.  
5

6 FASANO: Okay. Did you check the status of your breaker? Where is  
7 your breaker located for the condensate pump? Did you check it?  
8

9 MILLER: That is located on the 305 level of the turbine building, which  
10 would have been one level higher than what I was.  
11

12 FASANO: On your way up did you check it?  
13

14 MILLER: No I did not. On my way to the control room I did not check  
15 the breaker.  
16

17 FASANO: Who would normally check the reason for say a condensate pump  
18 failing?  
19

20 MILLER: The control room operator would usually have one of the auxiliary  
21 operators check that. And I know we did check it later in the evening.  
22 I'm not positive but I believe that pump started back up for them. The  
23 control room operator, I believe, was able to start that pump back up  
24 again right away but I cannot swear to that statement.  
25

1 FASANO: Someone did check the breaker board though?  
2

3 MILLER: We had checked it later in the evening. I would guess, or try  
4 and estimate the time ....  
5

6 FASANO: This would be on a motor control center?  
7

8 MILLER: Yes the motor control center would have been on either 2-3 or  
9 2-4. It was, I believe it was somewhere in the neighborhood of 5:00  
10 that we checked that breaker.  
11

12 FASANO: As an auxiliary operator, do you know what causes a condensate  
13 pump to trip? Do you have, is that within your realm of knowledge?  
14

15 MILLER: Not totally, as far as I must know but I have some pretty  
16 decent ideas as far as you know just knowing the electrical systems in  
17 going over the things, that they will trip on over current. There is,  
18 I've looked, looked into it since the accident for a little bit more  
19 information on it. And there were no trips on say if you deadheaded the  
20 pump  
21

22 FASANO: If you deadheaded the pump?  
23  
24  
25

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1 MILLER: In other words if you pump it against closed valves as we had  
2 in the polishing systems, the pumps would continue to run even though  
3 there is nowhere to pump the water.  
4

5 FASANO: You say an over-current exists?  
6

7 MILLER: Yes, there is one I know of for sure. And  
8

9 FASANO: And if you have over-current what would expect to see if you  
10 went to the motor control center?  
11

12 MILLER: I believe there is what they call a red flag that falls on a  
13 relay there and you would just have to manually reset it by taking your  
14 finger and just pushing up a small lever there to reset those red flags.  
15

16 FASANO: If you had gone there you'd have known?  
17

18 MILLER: We had gone there later in the evening but there were no flags.  
19

20 FASANO: No flags? So it was completely wired and ready to go?  
21

22 MILLER: Yes.  
23  
24  
25

895 230

1 FASANO: The circuit was there?  
2

3 MILLER: Yes.  
4

5 FASANO: I asked you that question mainly because I am interested in  
6 finding out what caused the condensate pumps to trip out. The logic  
7 doesn't seem to lend itself to ... you know, the cause is just not quite  
8 evident.  
9

10 MILLER: ah certainly agree with you and have gone over electrical  
11 prints which I'm not really not that schooled on reading them. But I  
12 have gone over them with engineering people that are working on the same  
13 problem. And I believe now that pump motor has been I know it's been  
14 pulled out, if it's been sent somewhere check or if it's around here to  
15 be checked out and to find out what actually happened.  
16

17 FASANO: You said the condensate pumps ... the booster pumps, I guess  
18 they're maybe ... what behind you?  
19

20 MILLER: Yes.  
21

22 FASANO: And you say they were running ... they continued to run?  
23  
24  
25

895 231

1 MILLER: Yes.

2  
3 FASANO: Were they still running when you left the area?

4  
5 MILLER: Yes, they were.

6  
7 FASANO: Did anything unusual happen as you were going ... anything  
8 unusual that normally doesn't occur, anything different?  
9

10 MILLER: Not at the direct time I left then. But I went to the control  
11 room and they wanted me to go back down and double check and make sure I  
12 had everything lined up that I could. Even though the valves were  
13 failed shut I had the rest of it all lined up and squared away and when  
14 I was headed back up to the control room the second time, which would  
15 have been about approximately about 15 minutes after the accident, or  
16 after the turbine trip, that I noticed suction line on the A booster  
17 pump blew to approximately 2-1/2 to 3 feet. It was like a water hammer  
18 whenever it blew pretty good, and then the suction valve there was a  
19 leak there in the suction valve.  
20

21 FASANO: In the valve like, in the packing?

22  
23 MILLER: Well, I really tell that because the way it's insulated, but I  
24 know there was leak there. I called the control room and started closing  
25



1 the valve and they sent ah Terry Daugherty and Dale Laudermilch down to  
2 help me get that valve shut.

3  
4 FASANO: Was it a gross leak or just sort of you know ... a few gallons  
5 coming out, or ... quarts?

6  
7 MILLER: It would have been in the gallons, but it wasn't really ...

8  
9 FASANO: Gushing?

10  
11 MILLER: Gushing, yes.

12  
13 FASANO: When you isolated it, did it stop?

14  
15 MILLER: Yes.

16  
17 FASANO: So you thought there was a water hammer, now that was on the A  
18 pump?

19  
20 MILLER: Yes, on the A pump. I believe I stated that wrong there as far  
21 as the I saw that pipe move when I went up the first time and when I  
22 came back down is when I discovered the leak.

23  
24  
25 895 233

1 FASANO: Okay, was it the same pipe?  
2

3 MILLER: Yeah, same pipe.  
4

5 FASANO: Okay, so the, when you were on your way up the first time ...  
6

7 MILLER: Is when I saw the pipe move.  
8

9 FASANO: You saw a movement in the pipe. When you came back that pipe  
10 which now goes to, the valve would be ... in line with this pipe, you  
11 saw it leaking?  
12

13 MILLER: Yes.  
14

15 FASANO: Did you ah mention that pipe movement to anyone else?  
16

17 MILLER: I believe I had mentioned it to the shift supervisor when I  
18 first went up stairs, yes.  
19

20 FASANO: Apparently operations had problems in getting the condensate  
21 water to flow. Were you involved in getting condensate water reestablished?  
22

23 MILLER: When you say condensate flow reestablished, are you ...for  
24 normal ...?  
25

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1 FASANO: Yes.

2  
3 MILLER: Normal condensate system, the problem we were having with  
4 getting normal flow started there would have been the condensate polishing  
5 vessel outlet valves being failed shut?  
6

7 FASANO: Yes. Well ...

8  
9 MILLER: You mean the emergency feedwater system problem we were had?  
10

11 FASANO: No, not, I ... no I was thinking of your involvement in the,  
12 the condensate ... you went back down?  
13

14 MILLER: Yes. I went back down ... back down to check to make sure we  
15 had everything all right there and I really don't know what the control  
16 room operator was looking for at the time, but I had everything lined up  
17 that we could expect that those valves were failed shut.  
18

19 FASANO: The two tanks you had ... you told me you still couldn't get  
20 the valves open so they really couldn't get water through the normal ...  
21

22 MILLER: Normal flow path was blocked.  
23  
24  
25

895 235

1 FASANO: Was blocked, yes .... Oh the other pumps ... the other conden-  
2 sate booster pumps ... did they continue to run? You had 2A that failed  
3 or had stopped?  
4

5 MILLER: Yes. The others the others were running.  
6

7 FASANO: They were still running?  
8

9 MILLER: Yes.  
10

11 FASANO: But the main feed had tripped out?  
12

13 MILLER: Yes.  
14

15 FASANO: Did you ... were you involved in setting up the bypass around  
16 the polishers?  
17

18 MILLER: Yes. Later, sometime during the course of the ... of that  
19 morning Terry Daugherty and myself opened that condensate bypass valve,  
20 which for some reason would not open electrically.  
21

22 FASANO: So what did you do, open it manually?  
23  
24  
25

895 236

1 MILLER: We opened it manually, and when we first crawled up to do the  
2 job the handle was missing, but it was laying right there on top of the  
3 ventilation duct, that is directly below the valve. So it was, you  
4 know, we just had to put it on get it open.  
5

6 FASANO: Is this unusual ... I mean to (1) have the handle off, and (2)  
7 have to unseat this by manual?  
8

9 MILLER: Unseating them manually is pretty much normal. You know you  
10 usually have to break them off the seat because you have a ... the  
11 difference in water pressure across the valve.  
12

13 FASANO: You don't have an equalizer across there?  
14

15 MILLER: No.  
16

17 FASANO: Alright go back to when you were clearing the ... doing your  
18 clearing operation, trying to unclog the resin, do you feel that this  
19 was possibly the cause of getting the air into your ... water into your  
20 air line?  
21

22 MILLER: I do now, yes.  
23  
24  
25

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1 RESNER: What did you think it was at the time? You said you think it  
2 is now.

3  
4 MILLER: At the time I didn't know, until, you know talking to a few  
5 more people, other people who have worked with this system and I found  
6 out talking to the other people that that check valve in that line do  
7 leak and it has happened before. And that with fluffing the air line  
8 open and then closed and demin water lined up to it that they have  
9 gotten air back into the system before.

10  
11 FASANO: This problem is something that you got, right when you came in  
12 on the 7th ... at 11:00 that ... on the 27th I mean it was there at the  
13 time you arrived ?

14  
15 MILLER: Yes.

16  
17 FASANO: The prior shift? When you have a problem like this, do aux  
18 operators have to solve it themselves and try to get this unclogged or  
19 can you get maintenance assistance or how is that done?

20  
21 MILLER: This is the first time I've been down there where the resins  
22 were clogged as hard as they really were. Normally through shooting air  
23 and running the demin water pumps we can clear them up. Now this is the  
24 longest I've been involved with any of them being clogged, but it's not  
25

1 the first time, but we've never had to go to maintenance or anything  
2 else in the past, but we've always managed, been able to break them  
3 free, that way.  
4

5 FASANO: In putting your demin pressure on the ... to do the unclogging ...  
6 what is this, putting a tube in or ...?  
7

8 MILLER: No, there is a, there is, normal demin water is used for trans-  
9 ferring resins normally, and all you have to is open the valve on the  
10 panel to allow demin water to get into the vessel.  
11

12 FASANO: Were you doing anything differently this time? Because now  
13 you've been ... it's been plugging could you put another source of water  
14 to increase your pressure ...  
15

16 MILLER: Well, I had started the second demin water pump, which I, we've  
17 used pretty much all the time when we are transferring resins. We'd get  
18 put the two of them on because they'll seem to move a lot better for  
19 you. The only thing it was doing different was the way it was operating  
20 with the air, trying to break them free.  
21

22 FASANO: When you when you leave an area ... oh when you leave an area  
23 after an event like this, where you have a turbine trip, and you do have  
24 to do things with the condensate systems, do you have a check sheet  
25

1 where you go through and see that all of the things that have to be done  
2 are checked off and sort of go through it as a step-wise sequence of  
3 checking your panel, checking the pumps, checking the valves, and I  
4 understand, as far as you are concerned, this was a ... pretty much at  
5 that point, a normal turbine trip and reactor trip. So did you?  
6

7 MILLER: We don't. We do not have a checklist as such that you described  
8 there. Usually you just take care of the piece of equipment or whatever  
9 you're working on at the time, get that squared away to the way it  
10 normally is for being shutdown conditions, or in this case with the  
11 polisher, knowing I have to have two vessels ready to go when we come  
12 back up that's the way I was attempting to line it up.  
13

14 FASANO: Yes, and then ...  
15

16 MILLER: And then we just go to the control room and whatever else the  
17 control room operators or shift foreman that are up there want done,  
18 then we go out on those jobs.  
19

20 FASANO: Do you have a procedure that really that describes the things  
21 you do at that time and at that station?  
22  
23  
24  
25

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1 MILLER: As per trip?  
2

3 FASANO: Yes.  
4

5 MILLER: For normal operating, yes there's a procedure there.  
6

7 FASANO: How about for a trip?  
8

9 MILLER: But for a trip there is no procedure right there at the panel.  
10

11 FASANO: Then you assume everything happens automatically and you take  
12 so many off line and you line up two resin beds for the return, is that  
13 correct?  
14

15 MILLER: Yes.  
16

17 FASANO: And that's the extent of ah your procedure?  
18

19 MILLER: For that condensate polishing panel, yes.  
20

21 FASANO: No checks on the pumps? The condensate pumps?  
22  
23  
24  
25

895 241

1 MILLER: No.

2  
3 FASANO: What did you do after you ... how long did you stay? Did you  
4 continue to work in that area or did you report back up to the ... once  
5 you got bypass in ... did you stay in the control room for future respon-  
6 sibilities or for any specific job?

7  
8 MILLER: Well, after we got that valve shut on the condensate booster  
9 pump, we went back up to the control room and I was up there around  
10 about 15 or 20 minutes and the shift supervisor, Bill Zewe, asked me to  
11 go down on the primary side and check what the pressurizer level was  
12 down there on some on two other, on another gauge. It's down in makeup  
13 valve alley, which is in the basement of the fuel handling building  
14 actually. And I checked that level, called them back with it was reading  
15 down there which was the 300 inches and I came back up to the control  
16 room. After we went down and well I didn't get back up to the control  
17 room I saw Terry Daugherty and he was headed for the condensate breaker  
18 so I went through that area with him. And that's why we didn't see  
19 anything tripped or anything, then we went back up then we went back up  
20 to the control room and I believe that's about the time during the  
21 morning that we were sent down to open CLD 12 which is the bypass around  
22 the polisher.

23 895 242  
24  
25

1 FASANO: The when you ... is this normal to have you down and check the  
2 pressurizer level? This was unusual?

3  
4 MILLER: This was unusual, yes.

5  
6 FASANO: And did that match pretty much what was up in the control room?  
7 300 inches?

8  
9 MILLER: I don't really know if it did or not. I know I told him what I  
10 was seeing down there and he said okay, and I guess they went back to  
11 work.

12  
13 FASANO: This is by telephone?

14  
15 MILLER: Yes, page system.

16  
17 FASANO: Page system. Who did you talk to?

18  
19 MILLER: Bill Zewe.

20  
21 FASANO: Alright, once you got the what was that the CLD 12?

22  
23  
24 895 243  
25

1 MILLER: Yes.

2  
3 FASANO: That's your bypass valve?

4  
5 MILLER: That's the bypass valve around the polisher.

6  
7 FASANO: Alright, once you had completed that and finished working with  
8 the verification of the pressurizer level, what else did you do during  
9 that period? You're getting close to your relief, I imagine, at this  
10 time?

11  
12 MILLER: Yes. Well one other job I had done during the night and I'm  
13 not even sure what time, and the only reason and I had totally forgotten  
14 it on any other interview or anybody else I'd talked to was I went down  
15 in the auxiliary building to open MUV 127 which was for emergency boration,  
16 and somehow another I was reading a sequence of events report and read  
17 that in there that it was done and that's when I finally realized I was  
18 involved with and worked on that one sometime during the morning also.  
19 And I imagine then it was up to around the time that we ... they announced  
20 the general emergency over the page system again.

21  
22 FASANO: By emergency borate does the auxiliary operator have to go down  
23 and open MUV 127?

1 MILLER: The 127 is the one valve that the auxiliary operator has to  
2 open.

3  
4 FASANO: Is that normal I mean do you always have to do this?

5  
6 MILLER: Always emergency borate? No.

7  
8 FASANO: Why in this case did you need someone to go down there, to open  
9 it?

10  
11 MILLER: I really don't know. What was going on in the control room or  
12 with the reactor or anything itself.

13  
14 FASANO: Alright, so you went to the aux building, auxiliary building,  
15 and you opened the 127, you reported back to the control room?

16  
17 MILLER: Yes.

18  
19 FASANO: About what time was this?

20  
21 MILLER: I guess somewhere in the neighborhood of 5:30., is what I'm  
22 thinking. I'm not positive though on that.

1 FASANO: This is a.m.?  
2

3 MILLER: Yes.  
4

5 FASANO: 5:00 a.m. Okay. Alright then did you get any other further  
6 assignments?  
7

8 MILLER: At that time no then we had gone out to start you know to what  
9 we call AO central where the auxiliary operator meet where we give our  
10 turnovers and everything. And we were in the process of just starting  
11 out when assigned, when they announced the general emergency.  
12

13 FASANO: About what time was this?  
14

15 MILLER: Approximately 10 till 7.  
16

17 FASANO: This was announced on the P.A.?  
18

19 MILLER: Yes. And then we all went in to the control room to ES station  
20 and then it was just little odd jobs here and there. Ah the only thing  
21 that I had got tem involved with was a feedwater pump for some reason or  
22 another the jack didn't seem to work that automatically turns the shaft  
23 over when the pump shut down, and we had to do it manually. So we were  
24 doing it about every every 10 minutes you would turn it half a turn.  
25

895 246

1 FASANO: This is the main feedwater pump? 1B?  
2

3 MILLER: I'm not sure which one it was, nonmenclature-wise.  
4

5 FASANO: So this would be close to where your normal station is in terms  
6 of the turbine building, correct?  
7

8 MILLER: Yes.  
9

10 FASANO: Did okay, did anyone, did you wear any, did you need any clothing  
11 or any special clothing or was the area checked for any ... at this  
12 time? This was after 7 now. You had been called and before you went  
13 into different areas were you checked, or was the area checked in any  
14 way for any kind of radiation at this time?  
15

16 MILLER: I don't believe the turbine building was. The auxiliary build-  
17 ing was totally isolated. Evacuated and isolated, earlier. That would  
18 have been right before the general emergency was declared that they  
19 evacuated the auxiliary building.  
20

21 FASANO: Would you have any indication that there may be some contami-  
22 nation in the aux and in the turbine building?  
23  
24  
25

895 247

1 MILLER: I didn't know at the time. There is there is a alarm down  
2 there off the vacuum, off the vacuum pump system. A radiation monitor  
3 down there, but there was no alarm sounding off of that, as long as I  
4 was down there during the course of the morning.  
5

6 FASANO: This was what, about what time?  
7

8 MILLER: I would say it was along about 10:00 or 10:30 I guess I left  
9 that area down there.  
10

11 FASANO: So 10:00 or 10:30 there was no indication of any kind of contam-  
12 ination in that area? Is that correct?  
13

14 MILLER: No. That's correct.  
15

16 FASANO: Alright, so you helped manually turn the turning gear on the  
17 feed pump?  
18

19 MILLER: Yes.  
20

21 FASANO: What then when you finished that you go back to the control  
22 room or back to your area?  
23

24 895 248  
25



1 MILLER: When we had gotten relieved there by the incoming shift, which  
2 was around 10:00, 10:30 I imagine, and then we were told to go in the  
3 auditorium in Unit 1 because of the general emergency and then we were  
4 gonna be, you know be able to go home.  
5

6 FASANO: This was about 10:00 or so?  
7

8 MILLER: Yes this was between 10:30 and 11:00 that we went to the audi-  
9 torium. From the auditorium they sent us up to the Unit 1 control room  
10 and then we were up there maybe 10 or 15 minutes and then we were released  
11 to go home. Then we went down and we were they had individual friskers  
12 and HP people checking us for any radiation or contamination that we  
13 might have had in any of our clothing or anything before we were okayed  
14 to leave the island. Then when we left the island we went to the 500 KV  
15 substation, across the river, and then over there they thoroughly checked  
16 the cars and checked us all again at a lower a considerably lower back-  
17 ground reading.  
18

19 FASANO: They you mean?  
20

21 MILLER: HP Department personnel  
22

23 FASANO: So they, before you left, they actually checked, you and your  
24 clothing. How were you, were you clean, or?  
25

1 MILLER: Yes, I was what we considered clean or there was no contamination  
2 of anything I had on.  
3

4 FASANO: And your car?  
5

6 MILLER: Same, everything was clean.  
7

8 FASANO: So, about ten thirty, eleven o'clock you then were free to go  
9 home?  
10

11 MILLER: Well we left the, like I said we left the island around eleven  
12 o'clock until we got to the 500 substation and everybody, you know, you  
13 stood in line and they checked everybody again, had a lot lower background  
14 over there. The background was extremely high here on the island. And  
15 we went over to the substation where they checked the cars and that was  
16 approximately 1:30 until we finally left over there.  
17

18 FASANO: You had turned in your TLD at that time?  
19

20 MILLER: No, I had my TLD with me. My TLD went home with me that day.  
21

22 FASANO: Is that normal?  
23  
24  
25

895 250

1 MILLER: It's not really abnormal for an operator to carry it with him  
2 because under normal situations they must be in the rack at midnight on  
3 the last night of the month is when they're changed and read, but then  
4 through the incident there for the first month I imagine, they were  
5 reading them every day. That we'd turn them in, well they had different  
6 locations when we came to work the next night we went to the observation  
7 center and they had a, they were in the observa-tion center one night,  
8 and then there was a trailer at the south gate and then there was, they  
9 set up this TLD area down here now.

10  
11 FASANO: When you were going back to the control room did you notice  
12 people wearing masks during that time up to ten or eleven, about ten  
13 o'clock or so?

14  
15 MILLER: No.

16  
17 FASANO: They didn't have any masks on at all at that time?

18  
19 MILLER: No. First I heard of the respirators is when we came back to  
20 work that evening.

21  
22 FASANO: Well Don, do, now we'd like you to just state some of the  
23 things, if you have any opinions on how things can be made better, if we  
24 can learn from what we, from this experience. Do you have any sugges-

1 tions or any ideas? You can take this as an opportunity to let it be  
2 known and it will be given attention, I'm sure.  
3

4 MILLER: Well the thing that I've told once to the foreman and I've  
5 stated it in all the other interviews that I would like to see those  
6 condensate polisher valve, outlet valves, be fail-as-is. That way if  
7 you had them closed and you lost electric, or air, they'd stay closed  
8 and if they were opened they'd stay open. And I imagine there ought to  
9 be something done to that bypass valve around the polisher. That, maybe  
10 an equalizer or something, you had mentioned, during the interview, that  
11 could equalize the pressure across there and that would work. Those  
12 were the two things there. Going back though, I still don't know every-  
13 thing about the accident and I guess none of us do, that's why we're  
14 still going through these interviews. But I'd like to really have the  
15 chance to go through that and really see exactly what happened all the  
16 way down the line and try and find out why.  
17

18 FASANO: I have nothing more.  
19

20 RESNER: Okay gentlemen, this concludes the interview with Mr. Donald  
21 Miller. The time now is 3:55 p.m. Eastern Daylight Time. On behalf of  
22 the Nuclear Regulatory Commission we'd like to thank you for taking your  
23 time Don and coming over here. That's it.  
24  
25

895 252