

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

1 In the Matter of:
2 IE TMI INVESTIGATION INTERVIEW
3 of Stephen L. Mull
4 Auxiliary Operator B
5
6
7
8

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

13 May 22, 1979

14 (Date of Interview)

15 July 3, 1979

16 (Date Transcript Typed)

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18 (Tape Number(s))

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20
21 NRC PERSONNEL:

22 Warren T. Hunter
23 Anthony Fasano
24 William H. Foster
25

896 007

1 FOSTER: The following interview is being conducted with Mr. Stephen L.
2 Mull. Mr. Mull is an Auxiliary Operator B at the Three Mile Island Nuclear
3 Power Facility. The present time is 2:03 P.M. Today's date is May 22,
4 1979. The place of the interview is Trailer 203 located immediately outside
5 the south gate at the TMI site. The individuals present for the interview
6 are: interviewers Warren T. Hunter and Anthony Fasano. Mr. Hunter and Mr.
7 Fasano are Inspection Specialists with the Office of Inspection and Enforce-
8 ment, Performance and Appraisal Branch. My name is William H. Foster. I
9 am the Senior Inspector Auditor of the office of Inspector and Auditor,
10 NRC. I'll be monitoring the interview. Prior to the interview being recorded
11 Mr. Mull was provided a document explaining his right concerning his infor-
12 mation to be obtained regarding the incident at Three Mile Island. In
13 addition Mr. Mull was apprised of the purpose of the investigation, it's
14 scope and the authority by which the Congress authorizes the NRC to conduct
15 the investigation. On the second page of the advisement document Mr. Mull
16 has answered three questions. The questions with Mr. Mull's answers will
17 now be recorded as part of the interview. Mr. Mull do you understand the
18 document?

19
20 MULL: Yes.

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

23
24 MULL: Yes.

896 008

25

1 FOSTER: Do you want a copy of the tape?

2
3 MULL: Yes.

4
5 FOSTER: Steve at this time could you provide us with a brief summary of
6 your academic background and your employment history as it relates to the
7 nuclear field?

8
9 MULL: I graduated from high school, Hershey High School 1972. I worked for
10 a year and a half in Reese's Factory in Hershey. I then entered Harrisburg
11 Area Community College. Graduated I think, in '75 with an Associates Degree
12 in Police Administration. I transferred to York College of Pennsylvania-
13 January '77. I had one semester to go. I got hired here. I've been taking
14 courses on and off at York College since, to finish my Bachelors Degree,
15 also in Police Administration. I have one credit now, or I have three
16 credits to go, one course.

17
18 FOSTER: OK, thank you Steve. At this point I am going to turn the interview
19 over to the IE personnel.

20
21 HUNTER: OK, Steve, Hunter speaking, and would like to pick up on the morning
22 of 3/28. As I understand it you reported to work for the eleven to seven
23 shift with Bill Zewe's crew.

24 896 009
25

1 MULL: Yes.

2
3 HUNTER: Is that correct? OK? Would you give us a brief run down of your
4 activities prior to the unit trip and then at 0400 when the unit trip
5 occurred, would you relate to us your activities starting at that point?
6

7 MULL: I was working in the industrial waste treatment plant, west of the
8 turbine building and basic functions were, you know, running both sides.
9 There's a filter side and a treatment side monitoring and you know, making
10 sure every thing's running right.
11

12 MULL: And all the pumps are working right, you know, and the sumps are not
13 too high. Just general jobs out there. 'Round four o'clock I was taking
14 readings out in the plant and I heard the trip go off. I walked to the
15 east side of the building, the industrial waste building, and it was just
16 .. it was loud, you know, it's always loud .. and.. I figured it was just a
17 normal run back or trip OK .. and.. I went back in, finished up the readings.
18 About 4:30 Dale Lauder Milch had called me and he had asked me to come on in
19 to the turbine building because they were having a lot of work to do, you
20 know, because of the trip. So, about 4:30 I'd say I started on the way in.
21 I went to Gate 7, I had called Security to leave me in the gate and they
22 came down, I didn't have an ID Badge. I had a Met Ed ID Badge but I didn't
23 have a blue entrance card and they said I'd have to go up through Unit I so
24 the guard drove me up there and I walked down through the Units and reported
25 right to Unit 2 Control Room.

896 010

1 HUNTER: OK, Steve, Hunter speaking, go back, you're at the Unit 2 Control
2 Room. We'll go back and look at a couple items. You said that the you heard
3 the trip. Did you hear the trip being announced or did you hear the safety
4 valve loud noise that you were speaking of?

5
6 MULL: Safety valves.

7
8 HUNTER: That's normal in the industrial area to hear the safety valves when
9 a run back or trip occurs?

10
11 MULL: Yes.

12
13 HUNTER: OK, and you finished your readings and then you proceeded after
14 Dale Lauder Milch called, you to then go into Unit 2 control room, OK. When
15 you got to Unit 2 control room, who did you report to?

16
17 MULL: Well, I, they were pretty busy, I didn't really report to anybody. I
18 stood right there and, you know, they all saw me and I figured that was the
19 best place to be, you know, if they had any jobs they could dispatch me
20 right from there.

21
22 HUNTER: OK. Steve and you said you stood. Where were you standing?

23
24 MULL: Right by the right desk, the CRO's desk.
25

1 HUNTER: OK, and what did you see when you went into the Control Room? Who
2 was in the Control Room at that time?

3
4 MULL: Well, Craig Faust and Ed Fredericks and George Kunder.

5
6 HUNTER: Where was George located at that time?

7
8 MULL: Well, they were all up around the panel.

9
10 HUNTER: Up at the left side of the panel which would be the primary makeup
11 by the panel or the right side of the panel like over by the auxiliary
12 feedwater system that's standing facing.

13
14 MULL: I'm pretty sure they were, or George anyway was by the left side.

15
16 HUNTER: OK.

17
18 MULL: And, I think, Craig and Ed were on either side of the panel.

19
20 HUNTER: OK. The interviews have shown that Ed Fredericks was on the makeup
21 panel, which would be the left. Craig was on the right hand side which
22 would be the auxiliary feedwater side, and was Bill Zewe in there at that
23 time? Do you recall?

24
25 896 012

1 MULL: I think he was, I'm pretty sure he was. I think Fred might have been
2 there but I couldn't swear to that either.

3
4 HUNTER: OK, Bill and Fred may have been there but you're not absolutely
5 sure.

6
7 MULL: Yes.

8
9 HUNTER: OK. Then you stood and watched the activity, OK? Was it loud or
10 quiet in the Control Room at that time?

11
12 MULL: It wasn't loud.

13
14 HUNTER: Were the fellows talking to each other?

15
16 MULL: Yes.

17
18 HUNTER: Quite readily, handily, loudly or...

19
20 MULL: They were discussing between each other different things that were
21 going on, you know, at the time.

22
23 HUNTER: OK, Steve, what about Donnie Miller? Was, was in the people standing
24 where you were, were there other people standing there any other A0's or
25 any other operators?

1 MULL: No, I was the only one.

2
3 HUNTER: OK. As you watched, then, what was the first activity that was
4 assigned to you?

5
6 MULL: UH.. Craig Faust, well now that I remember Craig was standing on that
7 side, OK, and he had told me to go out and check to see if the turbine was
8 running yet and I went out there and it was and I came back and a couple
9 minutes later and asked me to go out and make sure it got on the turning
10 gear. So, I went out there and its a normal function or an automatic function
11 and it did. There was no problem there. I went back in and waited a
12 couple more minutes and Bill Zewe asked me to go out and isolate the second
13 stage reheat of the moisture separator reheaters.

14
15 HUNTER: OK.

16
17 MULL: And I went out there, that took a little while. I had trouble getting
18 them off the seats and...

19
20 HUNTER: Allow me to inter, to break in a minute, Steve. Can you give me a
21 feel for the time, any of the times that you, that, for instance the turbine
22 went on turning gear automatically? Did Bill Zewe, you completed that and
23 if that went on automatically you wouldn't have taken long to go up and
24 make sure that it did.

25
896 014

1 MULL: Well, it's I'd say, I got in the Control Room probably around a
2 quarter of five and I'd say, maybe, by five-ten after, I had made sure the
3 turbine was on the turning gear.

4
5 HUNTER: OK.

6
7 MULL: I couldn't swear to that, but...

8
9 HUNTER: Ok. That's alright. And then you went outside, and and that's not,
10 that's not unlikely. It usually takes about an hour and fifteen minutes or
11 an hour, and ten minutes for a turbine on vacuum to close down.

12
13 MULL: Well I really cause so many things were going on that it's hard to
14 relate time to.

15
16 HUNTER: We are more interested in the activities than we are the actual
17 time. But if you can remember that happened then that would help out. OK.
18 You got the second stage reheat, you said, it took some time because the
19 valves were hard to get off their backs.

20
21 MULL: Yeah. I had to get a pipe wrench.

22
23 HUNTER: And you completed that activity. Then did you com back to your
24 next, did you come back to the Control Room?

1 MULL: Yeah.

2
3 HUNTER: OK.

4
5 MULL: And I think, as I was getting done with the isolation valves, Donnie
6 Miller and Terry Dougherty were going over towards the Control Room and, I
7 can't remember exactly where I met them, if it was in the Control Room or
8 on the way, but they were going to the basement to do a job and I had
9 followed them down to see if I could help them.

10
11 HUNTER: What job was that that you got involved in? Do you recall?

12
13 MULL: Well, they were doing something with the condensate pumps. I think I
14 met them on the way. OK, and we went down and they were over by the conden-
15 sate pumps and Bubba Marshall had asked me to isolate the discharge valves
16 on the polisher panel. It's like a it's an air operated valve that you turn
17 down, and I wasn't, really, watching what they were doing at that time, you
18 know, all I can remember is, like one of the condensate lines right over
19 head was, you know, it was shaking and there was, it was leaking pretty bad
20 and, after I did that I went up stairs and sometime within the next couple
21 minutes I had gone to the primary side with them I thought I could help
22 them on a job over there, and they took care of that and then that's, I had
23 gone back up to the Control Room.

24
25 896 016

1 HUNTER: Steve, Hunter speaking, when you went down to check on the polisher
2 valves what did you do? What did you do when you got to the valves?

3
4 MULL: I, it's the control is right on the panel OK, and he asked me to
5 turn them down and that's what I did. I turned the valves, the nozzles
6 down, it's a pressure indication, you know, and I turned them back to zero.

7
8 HUNTER: What would that do to the valves?

9
10 MULL: Shut the valves, or take some pressure off the valves.

11
12 HUNTER: Do you know if the valves were closed already at that time?

13
14 MULL: I think

15
16 HUNTER: The discharge valves?

17
18 MULL: Yes I'm pretty sure they were I'd say pretty positively they were
19 all in the red.

20
21 HUNTER: They were all closed down?

22
23 MULL: Yes, or in the green, yes.

24 896 017
25

1 HUNTER: Hunter, speaking, Steve again. You indicate you went over on a
2 primary jobs? Do you recall?

3
4 MULL: Well, you know, i was, I was in the area with them and as they were
5 doing jobs I, you know, a lot like at that time, a lot of the valves are
6 hard to close or open whatever they had to do, and I was like going to help
7 you know, help them in whatever functions they were doing.

8
9 HUNTER: Do you recall what you were doing? As far as with them, or what
10 they were doing? Did you operate any electrical breakers? Any valves or
11 anything?

12
13 MULL: No. Well, the thing is they were taking care of what they had to do.
14 So, from the primary desk then they had gone, I think they went downstairs
15 I was going, I was a little ways behind them because when I was shutting
16 them down they got a little in front of me when they were going primary
17 side and I thought they went downstairs and at that moment I had lost them
18 OK. So, I went, I went back up to the Control Room at that point and I was,
19 it was probably around seven o'clock by then.

20
21 HUNTER: OK. Did you stand around then, when you got to the Control Room
22 that time did you notice that anything had changed? Seven o'clock.

23
24 MULL: A lot more people there.

25
896 018

1 HUNTER: More people?

2
3 MULL: Relief crews were coming in.

4
5 HUNTER: What about the site emergency?

6
7 MULL: That's, that's about when that was called because I can remember
8 when it was coming in there was somebody running around with a roster
9 sheet, you know, and they were marking off people that were coming in and
10 you had to make sure your name got on.

11
12 HUNTER: Did you, hear the site emergency declared?

13
14 MULL: I don't remember it being called.

15
16 HUNTER: If it had been declared a few minutes earlier, you would have been
17 somewhere downstairs or in the auxiliary building?

18
19 MULL: Yeah. I was probably, I would have been maybe in the loud area
20 because there were loud areas that I had been going through, you know, like
21 the basement of the turbine building is pretty loud.

22
23 HUNTER: OK. You ended up in the Control Room then. Did you, were you
24 assigned another activity then?

25 896 019

1 MULL: No. The relief crew had been in there, you know, or come in and they
2 started giving them jobs, you know, because we were pretty deep by then.

3
4 HUNTER: OK, Steve. Looking back, your activity associated with the...
5 polishers was at the request of Bubba Marshall. You ran the air signal on
6 the discharge valves back to zero.

7
8 MULL: Yes.

9
10 HUNTER: What about as far as the condensate pumps? Were you involved in
11 any breaker operations or the valve operations,...isolation of condensate
12 booster pumps or any of that activity?

13
14 MULL: No.

15
16 HUNTER: There was a young lady turning the main feed pump on the jack,
17 manually turning it. Were you involved in that area at all?

18
19 MULL: No.

20
21 HUNTER: OK. Any trips to any local motor control centers in the auxiliary
22 building to open or close breakers, remove locks, or operate any breakers
23 in the auxiliary building?

24 896 020
25

1 MULL: All I did in the aux building was try and catch up to them and by
2 the time they turned the corner I had lost sight of them so I figured I'd
3 go back up to the Control Room then

4
5 HUNTER: OK. And the relief crew came in and then what did you do?

6
7 MULL: Hot stand by.

8
9 HUNTER: Is that right? Did you stand around just waiting for jobs?

10
11 MULL: Yes.

12
13 HUNTER: No jobs? Were any other jobs assigned?

14
15 MULL: Well, they were but the fresh crews...there were three crews on
16 then.

17
18 HUNTER: How long did you stay that day?

19
20 MULL: I think ten thirty. I'm not positive.

21
22 HUNTER: Your path then from, on the way out. Did you go via Unit 1 to the
23 Observation Center?

24 896 021

25

1 MULL: Well, you know, we went through the whole way?

2
3 HUNTER: Alright.

4
5 MULL: Out through Unit 2 and out to our cars.

6
7 HUNTER: Were you contaminated?

8
9 MULL: No.

10
11 HUNTER: Was your car checked?

12
13 MULL: That's OK I got it. I went, I had gone...

14
15 HUNTER: Was your car...did they check your car?

16
17 MULL: Yes. We went through Unit 2 and my car was still parked down by the
18 industrial waste cause I had reported there for work and I think Dale
19 Laudermlch took me back down to my car. It was either Dale or Terry. And
20 I got my car and we went out to the North Gate and they instructed us to go
21 to the 500 KV station.

22
23 HUNTER: They checked your car. And did they check you there?

24
25 896 022

1 MULL: Yes.

2
3 HUNTER: OK. And after that time now, when did you go home?

4
5 MULL: Yeah, well we knew that we'd be coming in at eleven that night and I
6 needed some rest. So, I went home right from there.

7
8 HUNTER: About noon, or a little before noon maybe?

9
10 MULL: Yeah, somewhere around there.

11
12 HUNTER: OK. Tony, any questions?

13
14 FASANO: Yeah, I have just a couple. You mentioned that you heard the
15 safety valves go which is normal. Was there any thing different about the
16 safety valves this time?

17
18 MULL: Seemed normal to me.

19
20 FASANO: Have you ever heard them go off before?

21
22 MULL: Yes.

23
24 FASANO: You mentioned also when you were going down to the polishers that
25 you saw a shaking pipe and leaks.

896 023

1 MULL: Yes.

2
3 FASANO: Was this with relationship to the booster pump in that area or the
4 condensate pump?

5
6 MULL: Yes.

7
8 FASANO: Which?

9
10 MULL: The booster pump.

11
12 FASANO: Do you know which booster pump?

13
14 MULL: "C".

15
16 FASANO: Was it running?

17
18 MULL: I couldn't say. I don't...

19
20 FASANO: How'd it sound down there?

21
22 MULL: Everything was loud, you know, it was pretty loud but to say that
23 the C was running, I don't think I could do that.

24
25 896 024

1 FASANO: Were the booster pumps running? There's three in a row down there.

2
3 MULL: I think they were but I'm not, you know, I can't say they were.

4
5 HUNTER: When you went to the Control Room, have you been on a trip before?
6 A unit trip and made it to the Control Room after the trip?

7
8 MULL: Yes.

9
10 HUNTER: OK. Did this trip look any different to you than any other trip?
11 Was there any thing that struck your eye, forty-five minutes, thirty minutes
12 into this trip?

13
14 MULL: Yes.

15
16 HUNTER: What was different?

17
18 MULL: George Kunder was there.

19
20 HUNTER: Is that only the difference? Would that, normally he wouldn't be
21 there?

22
23 MULL: Well I don't know, normally, he wouldn't be there but, you know,
24 we've had trips before and I guess it never struck my eye that he wasn't
25 there but just this one time it.. I think then it's when I realized, you

1 know, it was really pretty serious or maybe a little before that when we
2 were really humping.

3
4 HUNTER: OK, Steve, thank you.

5
6 FOSTER: Thank you very much, Steve. Correction this interview was begun at
7 1:03 PM and it was concluded at 1:25 PM.

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