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THE UNITED STATES
NUCLEAR REGULATORY COMMISSION

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In the Matter of: :
METROPOLITAN-EDISON (TMI II) :
- - - - - X

NRC Trailer No. 1
TMI Nuclear Station
Middletown, Pennsylvania
Thursday, October 9, 1980

Deposition of
CRAIG C. FAUST

the deponent, called for examination by the staff of the
Nuclear Regulatory Commission, pursuant to notice, at
10:05 a.m., when were present on behalf of the respective
parties:

- For the Nuclear Regulatory Commission
- NORMAN C. MOSELEY, Office of Inspection and Enforcement
- TERRY HARPSTER, Office of Inspection and Enforcement
- JOHN W. CRAIG, Office of Inspection and Enforcement
- RICHARD K. HOEPLING, Office of the Executive Legal Director
- DAVID H. GAMBLE, Office of Inspector and Auditor

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1 On behalf of the Deponent:

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1 generator and just the plant itself, which at the time there
2 weren't any, writing up what is known as tagging orders and
3 getting them ready to go out into the plant. That is about
4 it really.

5 Q You were not handling one of the control panels or
6 one of the boards at that point in time?

7 A No, I wasn't.

8 Q Who were you reporting to in doing this duty? Who
9 was your direct supervisor?

10 A It would have been my foreman at the time, or if
11 he wasn't in the room then the shift supervisor, or if he
12 wasn't in the room and I was doing anything to affect the
13 plant I would have talked with the control room operator on
14 the panel at that time.

15 Q Your supervisor then would have been Mr. Zewe?

16 A Yes.

17 Q Would you describe for us your recollections and
18 any actions that you took at the time of the containment
19 pressure spike?

20 A The actions I took were to regain the
21 configuration I had on the make-up pumps after we just sort
22 of locked around to see if the problem went away in other
23 words.

24 Q Would you describe for us first what you saw and
25 what you heard?

1 A What I saw was a spike on a graph. When Ed
2 Frederick nudged me and I looked over he was standing beside
3 me on my left, and I just looked over at the graphs and
4 noted two spikes on each of the graphs. I noticed the
5 make-up pumps reinitialized as far as equipment right in
6 front of me because that is what I was concerned about at
7 the point. That was really about all I saw initialize. I
8 knew other things went because what it did was it
9 reactivated the four-pound building signal on the safety
10 features actuation.

11 Q So there was an initiation of the SFAS which you
12 recognized at the time?

13 A Yes.

14 Q Did you see or were you aware that the containment
15 spray pumps came on?

16 A I don't know at what point I was aware of it, but
17 I had known that they had come on. I think it was more just
18 hearing the order that shut them off -- or it was not the
19 order, it was just -- I can't even say it. It is too long.
20 I knew they were shut off. Let's put it that way.

21 Q And actions that you took were related to the
22 make-up pumps?

23 A Yes.

24 Q What actions were those?

25 A I think you are going to have to refer back, but I

1 think the "A" and the "C" make-up pumps came back on and I
2 believe at that point I was on a configuration of one pump
3 running for the demand that we were supplying and I just was
4 restoring it back to that configuration after we saw that
5 there wasn't any further addition to the problem, whatever
6 caused the building pressure to rise like that at the time.

7 Q Did you participate in or overhear any
8 conversations concerning the cause of the spike?

9 A The main conversation that came up at that time, I
10 didn't even get involved in it, that I heard, let's put it
11 that way, was really that we were checking to see if it was
12 actually a malfunction in the instrumentation itself that I
13 could say I heard somebody say something about it. We
14 weren't sure. We really didn't know.

15 Q You weren't involved in this conversation, you
16 overheard it; is that correct? Isn't that what you said?

17 A If you want to call it overhearing a conversation
18 because even that was fragmented. Like I said, I was really
19 concerned about the make-up pumps and their importance and
20 what we were doing and not losing them.

21 Q Do you recall if instructions were given to
22 someone to do something in terms of following up on that?

23 A Not that I remember right now, no.

24 Q But you recall that there was some discussion
25 about it maybe being caused from some electrical problem?

1 A Well, that is what we sort of were looking at.
2 That is what they were trying to verify whether there was a
3 problem with the instrumentation. That is what came on the
4 strongest, let's put it that way, that I can remember. I
5 know that was one point they were looking at.

6 Q Do you recall who was involved in this
7 conversation or discussion?

8 A I would have to guess. That would be the best I
9 could do right now. You would have to go back if I said
10 something before in reference to it.

11 Q But today you don't recall?

12 A No.

13 Q Were there discussions later about other possible
14 causes for this or was there any conclusion reached as to
15 what the cause was that you were aware of?

16 A What time later?

17 Q Any time that you have a recollection on March
18 28th.

19 A Not really, not that I was aware of. I didn't get
20 any discussions on that point on March 28th.

21 Q Just to make sure I understand. You recall that
22 there were discussions or conversations related to whether
23 or not it would have an electrical instrumentation cause but
24 you don't recall any conclusion from that discussion or
25 conversation?

1 A No.

2 Q And you don't have any recollection of any further
3 discussion about the cause of the spike on March 28th?

4 A Not on March 28th, no.

5 Q As a follow-up to the indications of the pressure
6 spike did you monitor containment temperatures?

7 A No, I did not.

8 Q Were you aware that anyone else was asked to,
9 directed to or did on their own volition?

10 A No.

11 Q What about the reactor coolant pump air cooling
12 system temperatures, to your knowledge, did anyone monitor
13 these as a result of the spike?

14 A No, not that I know of.

15 Q To your knowledge, was pressure instrumentation
16 which uses the containment as a reference checked
17 immediately following the spike?

18 A I didn't really think about it at the time. Like
19 I said, I was worried about the make-up pumps. I knew the
20 spike had occurred because my attention was directed towards
21 it. I did not get involved in trying to verify what had
22 caused it really.

23 Q Nor are you aware of anyone else having done this;
24 is that correct?

25 A Well, from what I said before, I was aware that

1 somebody was looking at it, but it was more from a problem
2 with the instrumentation to verify that something didn't
3 enter into both of them, some noise level or something, I
4 guess, that would have caused both of them to jump like that.

5 Q Well, these other things that I just asked you
6 about are sort of confirming type indications that would
7 have confirmed the spike that was seen on the pressure
8 recorder and I was just wondering if you were aware on March
9 28th if any of these other things had been checked?

10 A I would have assumed that was in with that check
11 on the instrumentation. That was just a verification of the
12 instrumentation if they had a problem with it or not, you
13 know, to back it up.

14 Q Do you have knowledge specifically whether any of
15 these things were done?

16 A Not that I could say factually, no. I did not
17 stop and verify that it was being done.

18 Q And you did not hear anyone being asked or told to
19 do these particular things?

20 A What I heard was that, and once again I can't even
21 say who. It was a discussion going on apparently beside me
22 because I heard somebody talk about let's verify it to see
23 if the instrumentation was all right, do a channel checking,
24 in other words, on the pressure.

25 Q How would you do that?

1 A I would imagine it would involve going up to the
2 panel itself to put in a signal from the transmitter, or
3 calling it up I imagine on the computer and see what, I
4 think there are six of them, see what the six pressure
5 ranges were doing, if they looked like they showed any kind
6 of a malfunction on the computer as far as the signal that
7 we would see from it.

8 Q Following the spike was an order given to inspect
9 or survey the containment to see if it was still intact to
10 the best of your knowledge?

11 A Not that I know of.

12 Q Did you hear any request for special radiation
13 surveys after the spike?

14 A No.

15 Q Mr. Faust, on March 28th did you hear directly or
16 were told of an order not to start equipment or not to
17 change its status, the equipment inside containment?

18 (Pause.)

19 Do you understand the question?

20 A The equipment inside the containment, not to
21 change anything?

22 Q Not to change its status, electrical equipment
23 inside the containment, don't change its status, if it is
24 running don't shut it down and if it is down don't start it
25 up.

1 A There were different times during the day, I maybe
2 can say it that way, that orders started coming from behind
3 me because I didn't even look behind me a lot of times. The
4 main thing I am getting at is when I started receiving
5 orders not to do something without a supervisor telling me
6 was when I actually got over on the make-up pumps because I
7 operated the secondary site of the plant for about the first
8 two to three hours ---

9 Q Yes, I am aware of that.

10 A --- before I shifted positions, and up until that
11 time I guess you would call them orders if you want to look
12 at it that way, but when Bill and I were talking and working
13 on the secondary site of the plant we were agreeing with
14 each other on what we were going to do next in relation to
15 that. When I got over to the make-up pumps I didn't really
16 even get any orders initially, and I can't tell you at what
17 point, but then there came orders to make certain
18 configurations on the pump for maintaining what was it a
19 hundred on each pump I guess it was. You will have to go
20 back in my testimony. I know I said it then, but we were
21 told to maintain so much vpm flow in at a staggered
22 configuration across the loops on the pumps.

23 Q This was in an attempt to favor one loop to try to
24 fill that loop? Was this what you were actually trying to
25 accomplish?

1 A By this time we had quite a few engineers in there
2 and whatever word they were getting or whatever our
3 supervisors were talking about back there to come up with a
4 reasonable amount of flow to at least ensure that the core
5 would be cooled by that flow alone going in was the number
6 that they got and was passed up to me, in other words, on
7 the make-up pumps in this case.

8 Q Let's try to see what time frame we are in. You
9 were on the secondary panel in the early hours?

10 A Right.

11 Q Until about what time, and if you don't know the
12 exact time you can perhaps relate it to something happening
13 like the general emergency being declared. Were you on it
14 up until that time?

15 A Yes. I was on the secondary site.

16 Q Okay.

17 A That had been declared before I moved over. Like
18 I said, I think it was between 7 and 8, somewhere in there,
19 that I actually moved over to the make-up pumps.

20 Q At the time that you moved to the make-up pumps ---

21 A That wasn't just walking from one panel to the
22 other. I had actually gone back and forth several times
23 because I was trying to turn over to a man that was
24 relieving me at the steam generators.

25 Q At that time when there was not much more

1 discussion of what was to be done and you began receiving
2 orders or directives from behind or was it later?

3 A It wasn't right at that point because I had made
4 several moves where I was talking to the foreman. In other
5 words, I was receiving direction to back off on the flow.
6 He was looking at the pressurizer level I imagine. He still
7 didn't receive any guidance at that point from behind him I
8 guess -- this is a guess now again -- because I walked into
9 that area and I essentially just started taking orders as I
10 saw from Fred in relation to what he was watching. In other
11 words, as he said back off the make-up flow a little bit
12 more I would be backing off and I got to the point where I
13 couldn't run two make-up pumps for a minimum flow
14 requirement on the pumps. So I told him I was going to put
15 the make-up pumps into a signal and try to go back to a
16 normal configuration on the pumps because I was also pegging
17 out seal injections on the reactor coolant pumps at the time
18 which isn't good to run them like that either and I was
19 going to try to go back to a one-pump configuration which
20 was plenty to supply the demand that we were calling for at
21 that point.

22 Q You mentioned Fred. Was that Fred Scheiman?

23 A Fred Scheiman, yes.

24 Q So Fred and you were working together. He was the
25 foreman who you were working with; is that correct?

1 A Right.

2 Q Could you relate it prior to the repressurization
3 as to when did this change take place between how you were
4 receiving your orders? Was it after the repressurization or
5 before? This is the morning repressurization.

6 A I don't think I can really say. I don't
7 remember. To clear that up even I would have to go over my
8 transcripts to try to figure that one out.

9 Q But it was some time in the morning time frame, 9
10 or 10 o'clock, before 10 o'clock?

11 A Right now I would take a guess; you know, I was
12 going to say about 10.

13 Q All right. Now, at this time you say that orders
14 were coming from behind, would you describe that for me a
15 little better?

16 A Somebody would say to do something with the
17 make-up pumps that was standing behind me.

18 Q Would this be Ross?

19 A That is the person I would name because he was
20 behind me.

21 Q So you would be getting this stuff from Ross
22 principally?

23 A I would say that, yes.

24 Q Not Kunder?

25 A I couldn't actually say. I don't believe it would

1 have been him.

2 Q Gary Miller?

3 A That I couldn't tell you.

4 Q Then going back to the question at some point
5 during the day did you receive orders or directions or
6 guidance, whatever term that would describe an instruction
7 to do something, did you receive or hear of one of these
8 directives to not start equipment; or to not change its
9 status within containment?

10 A For me it was just the make-up pumps that I
11 heard. That is what I am trying to say.

12 MR. McBRIDE: Can I interject something? I think
13 I might clear things up a little bit. I think there are two
14 separate kinds of directives that the two of you may be
15 speaking of and there may be a little confusion here.

16 I think what you are driving at is whether there
17 was an order dealing with not to start any DC or
18 electrically operated equipment at any point during the
19 day. I think what Mr. Faust is describing is a general
20 directive that with the number of supervisory personnel who
21 were in there that the CRO's discretion was reduced, if not
22 eliminated, and they were only to do what they were told by
23 somebody more senior to them.

24 So if a little more specificity is given as to
25 which directive or order you might be referring to I think

1 it might clear it up a little bit.

2 MR. MOSELEY: Well, I certainly from prior
3 testimony understand that the way of operating on that day
4 was somewhat different than normal. I understand that there
5 would be an operator at each panel and then there would be a
6 foreman at each panel. Then these people would receive
7 direction from the shift supervisor or perhaps Mr. Ross and
8 orders would be transmitted in this way.

9 Is that a reasonably correct understanding of how
10 it worked?

11 THE WITNESS: Nobody told me that that was what we
12 were setting up at the time, but that appears to be what it
13 came to.

14 BY MR. MOSELEY:

15 Q Now, what I am really trying to get at is an
16 understanding of whether or not you heard or received any
17 instruction that said in effect don't start any equipment in
18 containment or don't shut any equipment down. Leave it as
19 it is.

20 A My answer to that is I would really go back to my
21 first testimony to see if I said anything. I don't remember
22 hearing that and I don't know if what I am thinking now I
23 heard later. You know, it is hard for me to distinguish
24 because at least I think I heard as to what you are saying
25 but I can't honestly say I remember that for a fact.

1 Q Okay. Let's address it directly. Specifically
2 after the pressure spike was there an order given, to the
3 best of your knowledge, an order or instruction to not stop
4 equipment for fear of an explosion of some sort?

5 A I would say no, not that I heard at that time from
6 what I can remember now.

7 Q You don't recall having gotten such an instruction
8 or heard one?

9 A No.

10 MR. HOEFLING: This is on 3/28 we are talking
11 about.

12 THE WITNESS: 3/28, right. When I ever received
13 an order it was directed towards the make-up pumps. To me
14 it wasn't for something in the containment. I feel like I
15 heard something to the effect of what you are trying to ask,
16 but I don't know if that is because I was in a lot of
17 conversations after that or what now.

18 BY MR. MOSELEY:

19 Q The instruction on the pump was an early morning
20 instruction to keep the pump operating? Is that one that
21 you had reference to earlier?

22 A Yes, I would say that. Yes.

23 Q Do you recall such an instruction being given at a
24 later time like March 29th or March 30th, the instruction
25 being one of do not start equipment, particularly DC

1 equipment?

2 A The way I would say it is we weren't allowed to
3 start anything unless a supervisor told us at that time.

4 Q Even on March 29th and 30th?

5 A We had to have a blessing before we did anything.

6 Q But you don't recall a general instruction that
7 was given of don't start stuff in containment because we
8 might have an explosion?

9 A I don't remember hearing that, but I am sure I
10 heard something to that effect because I was operating in
11 the control room and it became that kind of a concern.

12 Q But you believe that would have been later than
13 March 28th, on another day?

14 A Yes.

15 Q You don't recall which day?

16 A I would say the 29th I guess.

17 MR. McBRIDE: But you are not sure?

18 THE WITNESS: No.

19 BY MR. MOSELEY:

20 Q Since you reported on site on March 28th what
21 pressures have you felt which influenced you either directly
22 or indirectly to change any of your recollections, if any?

23 A I don't know if I changed them.

24 Q I am not asking whether or not you changed them.
25 I am asking whether you felt any influences or any pressures

1 that would have caused you to have change them.

2 A A lot of interviews.

3 Q But those interviews would have had the effect of
4 perhaps calling your attention to certain things?

5 A No. What I do know happened is through the number
6 of interviews I had I had to end up telling them to go to
7 the first interview as to just how I actually perceived the
8 feeding of the steam generators and the operation of the 11
9 valves. I think I made up a story altogether different from
10 what I first started saying. I actually was trying to
11 remember how the lights went, the sequence of the lights
12 went because that was what was cueing me somewhat and also
13 the demand on valves. Then I was trying to say what would
14 reasonable make me do that that way and I ended up changing
15 my story I believe and I actually went to the lawyers and
16 told them.

17 Q But this is on your own volition that as you
18 thought about it you recognized that your recollection had
19 changed?

20 A I had quite a few interviews by that time and it
21 seemed to me like I was changing it as I went through
22 interviews. Like I was saying really, you know, logically
23 it wouldn't have been that way, it should have been this way.

24 MR. HOEFLING: But aside from the interview
25 process itself have you felt any pressures or influences?

1 THE WITNESS: The only problem I am having is
2 trying to keep what I knew at that time separate from what I
3 have learned as we went through the whole process. It is
4 still hard for me to remember what I knew then before I
5 actually picked up information later because it seems like I
6 should have known it then now. That is a poor answer.

7 MR. MOSELEY: No, I understand completely, and I
8 am sure that all of us are afflicted with that problem.

9 MR. McBRIDE: Let me if I can just interject
10 something to clear up a phrase that he used that may have
11 been unfortunate.

12 Mr. Faust, when you used the phrase "made up a
13 story" can I safely assume you didn't mean that you
14 fabricated something or lied, but rather than you went back
15 through your memory and what you know about the plant and
16 discerned what happened that appeared to be different from
17 your first recollection?

18 THE WITNESS: That would be a better way of
19 stating it, yes.

20 BY MR. MOSELEY:

21 Q Mr. Faust, do you have any knowledge that
22 information was withheld from the NRC on March 28th?

23 A No, I do not.

24 MR. MOSELEY: That completes our questioning. We
25 will furnish a copy of the transcript to you as soon as we

1 can and ask you to make any corrections you feel necessary
2 and we will also ask for quick turnaround if possible
3 because we are trying to get through with this job.

4 THE WITNESS: Okay. Thank you.

5 (Whereupon, at 10:30 a.m., the taking of the
6 deposition concluded.)

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NUCLEAR REGULATORY COMMISSION

This is to certify that the attached proceedings before the

in the matter of: METROPOLITAN-EDISON (TMI II) - DEPOSITION OF
CRAIG C. FAUST

Date of Proceeding: October 9, 1980

Docket Number: _____

Place of Proceeding: Middletown, Pa.

were held as herein appears, and that this is the original transcript thereof for the file of the Commission.

Mary C. Simons

Official Reporter (Typed)

Mary C. Simons

Official Reporter (Signature)

NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

Corrections to the October 9, 1980, Interview of Craig C. Faust:

Page Line Change To Read

No changes to be made.

Craig C. Faust

Craig C. Faust
DATE 1/7/81