

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

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GENERAL PUBLIC UTILITIES CORPORATION, :  
JERSEY CENTRAL POWER & LIGHT COMPANY, :  
METROPOLITAN EDISON COMPANY and :  
PENNSYLVANIA ELECTRIC COMPANY, :

Plaintiffs,

80 CIV. 1683  
(R.O.)

-against-

THE BABCOCK & WILCOX COMPANY and :  
J. RAY McDERMOTT & CO., INC., :

Defendants. :

-----x

Continued deposition of METROPOLITAN  
EDISON COMPANY by BRIAN A. MEHLER, taken by  
the Defendants, pursuant to adjournment,  
at the offices of Davis Polk & Wardwell, Esqs.,  
One Chase Manhattan Plaza, New York, New York,  
on Thursday, July 30, 1981 at 9:45 o'clock a.m.,  
before Joseph R. Danyo, a Shorthand Reporter  
and Notary Public within and for the State of  
New York.

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PDR ADOCK 05000289  
T PDR



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## 26     ALSO PRESENT:

                   ROBERT P. CONNON

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1  
2 B R I A N A. M E H L E R, having been previously  
3 duly sworn, was examined and continued to  
4 testify further as follows:

5 EXAMINATION (continued)

6 BY MR. BENEDICT:

7 Q You understand that your testimony today  
8 continues to be under oath?

9 A Yes, I do.

10 Q I show you a document that has been  
11 marked as B & W Exhibit 243 for identification.  
12 It is a letter from Mr. E.G. Ward of B & W to  
13 J.J. Barton of GPU Service Corporation, and your  
14 name is written in the upper left-hand corner.  
15 This is a copy of a letter taken from a file  
16 identified as one of your files given to us by your  
17 counsel.

18 Did you receive this letter or a copy of  
19 this letter in the ordinary course of business?

20 A I don't recall receiving this letter.

21 Q Is it normal practice for you to receive  
22 letters not addressed to you from B & W which are  
23 routed to you by the recipient or some other person  
24 at Met Ed?

25 A I do receive correspondence that is routed to

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me from other people.

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Q Does that correspondence include  
correspondence from B & W?

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A Some of it is.

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Q Looking at the first paragraph, the fourth  
line down, there is a sentence which reads, "Our  
concern is that the fix be completed before a  
return to plant operation at power. The specific  
items we are concerned about," and then there are  
five numbered items. Would you read the item following  
the numeral 2, please?

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MR. GLASSMAN: I think we all read that,  
I do not see any reason for the witness to  
read a portion of the document into the  
record that he does not recall receiving  
which says, "Electromatic relief valve which  
fails open on loss of power."

Q Would you read that into the record?

MR. GLASSMAN: I do not think he should  
do that. The document speaks for itself.

Q Moving things along, after the numeral 2,  
there appears the statement, "Electromagnetic  
relief valve which fails open on loss of power."

Does that refresh your recollection that

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you were aware prior to discussions with counsel in preparation for this deposition that there had been a failed open PORV at an incident at unit 2 prior to May 2nd, 1978, the date of this letter?

A No, it does not refresh my memory.

Q Is it still your recollection that the first time you heard about a failed open electromatic relief valve or PORV occurring on a TMI reactor prior to the event of March 28, 1979 was during your conversations with counsel in preparation for this deposition?

A I don't recall if I had prior knowledge before preparation with counsel.

Q I show you a document that has been marked 244 for identification and advise you it is a document we received from your counsel which was identified by your counsel as coming from your files. The document is headed "14:00:01 03/29/78."

Could you identify what this document is?

(Document headed "14:00:01 03/29/78" was marked B & W Exhibit 244 for identification, as of this date.)

A It looks, to the best that I can recall, like a sequence of events out of the computer.

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Q Is this a record of alarms?

A No. This would be after certain initiating events, you can request a sequence of events to be printed out in the computer, and this is what it looks like it is to me, a sequence of events that was requested.

Q Do the printed numbers at the top of the page which I read earlier, .14:00:01 03/29/78, mean that this is related to something that occurred at 1400 hours and one second on March 29, 1978?

A I could not say for a fact that that time and date represents when something occurred, but I believe it would be when it was asked for.

Q Did you receive this document in the ordinary course of business sometime after March 29, 1978?

A I don't recall.

Q Do you recall reviewing any sequence of events as you described it, or other computer-generated material with respect to the incident which we have discussed previously which occurred on March 29, 1978 involving a loss of power resulting in an open PORV?

A I don't recall.

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2 Q Directing your attention to the entry  
3 about halfway down the first page of this exhibit  
4 which reads "15:29:55 high 0402 RC PRESS REL VLV RV2  
5 OUT TEMP 218.6," does that indication mean that  
6 reactor coolant pressure relief valve RV2 temperature  
7 on the thermal couple downstream from the valve  
8 itself is reading 218.6 degrees Fahrenheit?

9 MR. GLASSMAN: Are you asking for this  
10 witness to give his recollection as to this  
11 document, or are you asking him to infer for  
12 you now what the abbreviations might mean?

13 MR. BENEDICT: I will start with, what  
14 is your recollection of the meaning of this  
15 entry?

16 MR. GLASSMAN: I am still not clear on  
17 what the question is. Are you asking whether  
18 Mr. Mehler has any recollection at or about  
19 March 29, 1978?

20 MR. BENEDICT: I am asking him what is  
21 his understanding of what this entry meant.

22 MR. GLASSMAN: When?

23 MR. BENEDICT: If he has a recollection  
24 of the time he received it, then we will  
25 start with that.

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MR. GLASSMAN: If he has a recollection,

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fine, I will let him answer.

4

A I don't recall receiving this document.

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Q Then reading this entry doesn't refresh

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your recollection?

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A No, it does not.

8

Q Do you receive in the course of your

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job as shift foreman and shift supervisor copies of

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sequence of events generated by the computer?

11

A Not normally. We will receive copies of

12

sequence of events after on the significant items.

13

Q But you do not, however, recall receiving

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this particular document or a copy of this document?

15

A No, I do not recall receiving this document.

16

Q Going down on the first page to an

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entry that starts "15:31:25," it reads across,

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"HIGH 0403 RC PRESS REL VLV RV1A OUT TEMP 202.4,"

19

and then the entry immediately below that, "15131125 HIGH

20

0404 RC PRESS REL VLV RV1B OUT TEMP 202.1."

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Does that refresh your recollection that

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you received this document at some time?

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A No, it does not.

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Q Have you ever seen this document to this

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A Not that I recall.

Q Does a comparison of the three entries that I have read, the one beginning at 15:29:55 and then the two that begin at 15:31:25, does that refresh your recollection that you knew that there was an open PORV with respect to the March 29 incident at Three Mile Island unit 2?

A No, it does not refresh my memory at all.

(Discussion off the record between witness and his counsel)

(continued on next page)

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2 Q There appears to be some handwriting on  
3 the upper right third of the first page. Is that your  
4 handwriting?

5 A That does not look like my handwriting.

6 Q Can you identify that handwriting?

7 A No, I cannot.

8 Q Turning to the second page, again in the  
9 right margin, there is a notation that reads -- appears  
10 to read, arrow pointing left 2-1v, and then an arrow  
11 pointing upward.

12 Is that your handwriting?

13 A It does not appear to be my handwriting.

14 Q Do you recognize the handwriting?

15 A No, I do not.

16 Q Turning to the fourth page of the Exhibit  
17 244, can you identify this document for me?

18 A I don't recall this document.

19 Q Is this document a copy of a memory trip  
20 review?

21 MR. GLASSMAN: You are asking whether the  
22 witness knows whether this is in the general  
23 format of a memory review?

24 MR. BENEDICT: Yes.

25 A It looks like it is in the format and it also

Mehler

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2 says on the upper righthand corner that it is Group 3,  
3 and it says "Memory Trip Review" so I would have to make  
4 the assumption that that is what it is.

5 Q The upper lefthand corner. There is a  
6 series of handwriting appearing, again on how you look  
7 at it, the top of the page or the righthand margin.

8 Do you recognize that handwriting?

9 A No, I do not.

10 Q It is not your handwriting?

11 A It does not look like my handwriting.

12 Q From time to time in the course of your  
13 business at Metropolitan Edison, do you receive copies  
14 of memory trip reviews?

15 A I have received copies of memory trip reviews  
16 along with other documentation on significant events  
17 that occur.

18 Q What does a memory -- what information does  
19 a memory trip review convey to the recipient?

20 MR. GLASSMAN: You are asking generally --

21 MR. BENEDICT: What it contains.

22 A It would contain a sequence basically of events  
23 of certain parameters in the plant along with the time  
24 and the parameter that it was monitoring in.

25 Q Do you recognize this as a document that

Mehler

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2 you received, this particular document as a document  
3 you received in the course of business sometime after  
4 March 29, 1978?

2

5 A I don't recall receiving this document.

3

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6 Q Does the memory trip review provide  
7 parameters both before and after the reactor trip?

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8 MR. GLASSMAN: Which reactor trip are we  
9 talking about? General format of what a memory  
10 trip review would set forth?

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11 A I don't know if it is before or after.

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12 Q Or both?

11

13 A Or both, yes.

12

13

14 Q Showing you a document that has been marked  
15 24S for identification, this document was produced to  
16 the defendants in this case by plaintiffs' counsel  
17 and was identified to have come from your files.  
18 It appears to be a letter or a draft of a letter to  
19 Mr. Boyce H. Grier, Director of Regulatory Operations,  
20 Region I, Nuclear Regulatory Commission, from someone  
21 whose initials are J.L.S., "Subject: REPORTABLE  
22 OCCURRENCE NO. 78-22/99X.

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24 Do you recognize this document as a  
25 document that you received in the ordinary course of  
business?

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A I do not recognize this document.

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(Copy of letter to Mr. Boyce H. Grier from J.L.S. marked B&W Exhibit 245 for identification, as of this date.)

6

Q You have never seen this document before?

7

A Not that I recall.

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Q Turning to the second page of the exhibit, there is a page headed "Synopsis of Event" which appears to be a two-page description of an event occurring on March 29, 1978.

12

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Is this a document that you received in the ordinary course of business?

14

A I don't recall receiving this document.

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Q Looking at the sentence at the beginning of the second paragraph on the page numbered 1 of the Synopsis of Event, it reads:

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"The rapid depressurization of the reactor coolant system initiated by the pressurizer electromagnetic relief valve (RC-R2) opening upon de-energization of Vital Bus Z-IV."

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Does this refresh your recollection that you were aware that there had been an open PORV during the March 29, 1978 event prior to your discussions with counsel in preparation for this deposition?

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A No, it does not.

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Q Going to the end of the third paragraph on this page, there is a sentence which reads, "Due to no position indication on the control console for RC-R2, the cause of the depressurization was not obvious to the operators."

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Does this refresh your recollection that there was no position indication for the PORV on Unit 2 prior to March 29, 1978?

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A It does not refresh my recollection on position indication on RC-RV2.

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Q Is it still your recollection that you cannot recall whether there was or was not a PORV indicator on Unit 2 prior to March 29, 1978?

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MR. GLASSMAN: Objection to the form, but you can answer.

A I believe that question was asked before, and before I answered it that I did not recall when the position indication was put in the PORV valve, whether it was originally installed or sometime later.

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23

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Q By originally installed, you mean it was part of the control room as it originally appeared at the start-up of TMI Unit 2?

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A That is correct.

6 1

2 Q Turning to the page marked number 4 in  
3 parentheses in B&W Exhibit 245, the page is headed  
4 "Sequence of Events, Initial Conditions."

5 Reading in the middle of the page it says,  
6 "T 0:01 Pressurizer Electromagnetic Relief Valve open,  
7 initiating RCS de-pressurization."

8 Does that sentence refresh your recollection  
9 that you knew there had been a failed open PORV on  
10 March 28, 1979?

11 A No, it does not.

12 Q Looking at this document that has been --  
13 or these two pages headed "Sequence of Events," Pages  
14 4 and 5, did you ever receive this document in the  
15 ordinary course of business?

16 A I don't recall receiving this document.

17 Q Do you recall ever seeing this document  
18 before today?

19 A No, I do not.

20 Q Turing to the page numbered 6 at the  
21 bottom of Exhibit 245, a page headed "Conclusions" and  
22 subheaded "Operator Action", numeral 2 reads, "The  
23 operators did not know the cause of the event until  
24 after it was terminated due to no indication for  
25 RC-R2, and if indication would have been available,

Mehler

7 1  
2 the operator could have closed the associated block  
3 valve."

4 Does my reading of those two sentences to  
5 you refresh your recollection that you knew that  
6 prior to March 29, 1978 the control room at Unit 2  
7 did not have a PORV position indicator?

8 A No, it does not.

9 Q Excluding for the moment your conversations  
10 with counsel in preparation for this deposition, were  
11 you ever made aware that there had been a failed open  
12 PORV at Unit 2 as a result of a loss of power?

13 A Not that I recall.

14 Q You do not recall any changes made to  
15 Unit 2 in order to insure that the electromagnetic  
16 relief valve or the PORV would remain closed on a loss  
17 of power?

18 A No, I was not aware of that.

19 Q Reading from Page 6 of Exhibit 245 under  
20 the heading "Equipment Performance", numeral 3,  
21 "RC3-PS8 high pressure contact should be changed to  
22 fail open on loss of power to prevent inadvertent  
23 opening of RC-R2."

24 Does that refresh your recollection that  
25 a change was made or was recommended to be made on

1  
2 Unit 2 to prevent inadvertent opening of the RC-R2  
3 on loss of power?

4 A No, it does not.

5 Q Turning to Page 7, numeral 4 under the  
6 heading "Equipment Performance", reading: "Position  
7 indication for RC-R2 should be provided in the control  
8 room."

9 Does that refresh your recollection that  
10 there was not a position indicator in the control room  
11 at Unit 2 prior to March 29, 1978?

12 A No, it does not.

13 Q Looking at the two pages, Pages 6 and 7,  
14 which are headed "Conclusion", did you receive this  
15 document in the ordinary course of business?

16 A I don't recall receiving this document.

17 Q Have you ever seen this document before?

18 A I don't recall seeing this document before.

19 Q Moving to Page 8, the page which is headed  
20 "Follow-up Action" and subheaded "Equipment Changes",  
21 looking at numeral 2 under the subheading "Equipment  
22 Changes", reading "An indicating light for RC-R2  
23 position has been provided in the control room."

24 Does that refresh your recollection that  
25 an indicating light for the PORV position was added

1  
2 sometime subsequent to March 29, 1978?

3 A No, it does not.

4 Q Is the RC-R2 another designation for the  
5 PORV?

6 MR. GLASSMAN: Mr. Mehler's current  
7 knowledge?

8 MR. BENEDICT: Yes.

9 A I believe the correct designation would have  
10 been RC-RV2.

11 Q Do you know the correct designation for  
12 the PORV block valve? You say that you understood that  
13 the correct designation for the PORV or electromagnetic  
14 relief valve is RC-RV2. Isn't that the designation  
15 for the block valve?

16 A No, I believe the correct designation for the  
17 block valve would be RCV-2.

18 Q Looking at the numbered page 8 and  
19 headed "Follow-up Action," do you remember ever  
20 receiving this document in the ordinary course of  
21 business?

22 A No, I do not.

23 MR. GLASSMAN: I hope if we have other  
24 documents which Mr. Mehler doesn't remember  
25 receiving and they are numbered sequentially

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and appear to be a part of the same document,  
there will be just a few simple questions in  
the beginning rather than repeating the same  
questions for each document.

Q One last question with respect to the  
document marked B&W Exhibit 245. Do you recognize  
any of the handwriting that appears on Exhibit 245?

A No, I do not recognize the handwriting.

(Continued on Page 383)

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Q Do you recognize the initials "JLS"?

MR. GLASSMAN: Is the question whether you recognize these initials or whether he knows anyone of such a name?

MR. BENEDICT: Whether he knows of any employee of Met Ed with the initials "JLS."

A I believe Jim Seelinger. I am not sure what his middle initial is.

(Multipage document consisting of a cover memorandum dated May 4, 1978 to Mr. G. P. Miller from J. L. Seelinger, re "Reactor Trip/ES Incident of 4/23/78" attaching a report entitled "Rx Trip/ES Incident 4/23/78" was marked B&W Exhibit 246 for identification as of this date.)

BY MR. BENEDICT:

Q What was Mr. Seelinger's position at Metropolitan Edison during the spring of 1978?

A I don't recall his correct title. I believe he was in charge of technical -- he was in charge of the engineers.

Q Does Mr. Seelinger send you copies of letters which he sends or proposes to send to regulatory bodies such as the NRC?

MR. GLASSMAN: You are asking whether it is

1

2 ever done?

3

4 MR. BENEDICT: Yes.

5

6

7 A I have received correspondence from Mr. Seelinger.  
8 I don't recall exactly what correspondence I received  
9 from him.

10

11

12 Q Does Mr. Seelinger ask you to perform a  
13 review function on any correspondence that he sends?

14

15

16 MR. GLASSMAN: Are you asking for a particular  
17 time frame or any correspondence? The question is  
18 most unclear.

19

20

21 MR. BENEDICT: I will have it read back. I  
22 think it is very clear.

23

24

25 (Record read)

26

27 MR. GLASSMAN: The question appears to be  
28 directed to the present tense.

29

30

31 BY MR. BENEDICT:

32

33 Q Mr. Seelinger works for Met Ed, does he not?

34

35 A That's correct.

36

37

38 Q At any time prior to his departure from Met  
39 Ed, did Mr. Seelinger ask you to review correspondence  
40 that he sent, was to send, or was proposing to send to  
41 anyone?

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44 A I don't recall if Mr. Seelinger ever requested  
45 that of me.

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Q You don't recall that he never did, however?

A I don't recall either way.

Q Turning to the exhibit marked B&W 246, which is an interoffice memorandum from Mr. J. L. Seelinger with carbon copies to a number of individuals including, in the middle column, a B. A. Mehler, the document is dated May 4, 1978. The subject matter is "Reactor Trip/ES Incident of 4/23/78."

Showing you Exhibit 246, is this a document you received in the ordinary course of business?

A I don't recall receiving this document.

Q Would it assist your recollection if I told you that we received this document from your counsel and it was designated to have come from your files?

A No, it would not.

Q Did you personally review your files and accumulate material to provide to counsel at their request in this litigation?

MR. GLASSMAN: I will allow the witness to answer, but I do note that the practice in the proceeding has been not to ask questions of this sort and not to belabor --

MR. BENEDICT: What sort is that?

MR. GLASSMAN: The precise question of

1  
2 exactly what documents were produced, how the  
3 production went procedurally, but I will allow  
4 you to answer.

5 For the record, I don't know where you are  
6 going.

7 BY MR. BENEDICT:

8 Q I am not focusing on what you were told by  
9 your counsel to do; I am asking only whether you  
10 personally undertook the physical process of reviewing  
11 your material in order to comply with whatever requests  
12 your counsel made.

13 A I don't recall the exact dates on the letter that  
14 was sent to me for the material that was supposed to be  
15 turned in. I believe the dates encompassed something  
16 like from '76 to 1980. All material that I had in my  
17 possession pertaining to Unit 2 was turned in. I did  
18 not individually read each page.

19 Q But you did look at your files? You looked  
20 at your files as opposed to delegating it to someone  
21 else to do?

22 A I did not have anyone to delegate it to.

23 Q These questions do not mean to be suggestive.  
24 I am attempting to obtain some information. You have  
25 testified --

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(Discussion off the record between witness and counsel.)

MR. GLASSMAN: I would like to note that the conference which counsel decided to put on the record was nothing more than a comment which could have been overheard. I hoped the witness would stay calm because he seemed to be excited by questions that he was taking as being harassing or having a meaning, perhaps, not intended by counsel.

MR. BENEDICT: I appreciate the efforts to keep this on a friendly basis.

BY MR. BENEDICT:

Q You testified that you do not recall receiving this document, is that correct?

A No, I do not recall.

Q Do you recall ever seeing this document?

A No, I do not recall.

Q At your counsel's request, I would like to ask you to review the document which is composed of several attachments, and if you could, tell me whether you recall ever receiving or seeing any page in this document at any time.

Have you had an opportunity to look through

1  
2 the document?

3 A I have skimmed through it.

4 Q Have you seen any material that you recall  
5 seeing prior to my placing it before you today?

6 A Not that I recall.

7 Q Was it your understanding prior to the March  
8 28, 1979 accident at Three Mile Island that there had  
9 been an occasion or occasions at Unit 2 where bubbles  
10 had formed in the reactor coolant system outside of the  
11 pressurizer?

12 MR. GLASSMAN: You are talking of TMI-2?

13 MR. BENEDICT: Yes.

14 MR. GLASSMAN: And the time frame is prior  
15 to the accident?

16 MR. BENEDICT: What he knew prior to the  
17 accident.

18 A I don't recall whether I knew prior to the  
19 accident that there was one occasion where bubbles formed  
20 in the hot legs outside the pressurizer.

21 Q You do know today that there was such an  
22 occasion?

23 A I do know today there was, to my recollection, one  
24 occasion where it occurred.

25 Q What do you know of that occasion? Would

1  
2 you describe it to me?

3 A Very basically, just what I was told, I could tell  
4 you.

5 MR. GLASSMAN: Exclude from your answer  
6 anything that you may have discussed with counsel.

7 MR. BENEDICT: Yes.

8 Q Exclude from your answer anything you  
9 learned for the first time from your counsel and have  
10 never learned outside of the presence of counsel, but  
11 the mere fact that you obviously discussed the matter  
12 with your lawyers doesn't insulate it from our  
13 discussions.

14 You say you do know today there was an  
15 incident at Unit 2 where bubbles formed in the reactor  
16 coolant system outside of the pressurizer. Is it your  
17 testimony that you cannot today recall whether you knew  
18 that before the accident on March 28th?

19 A No, I cannot recall if I knew it before or not.

20 Q What information do you recall about this  
21 incident?

22 MR. GLASSMAN: Just so the question is clear,  
23 in terms of what information he recalls, you are  
24 asking for his recollection of knowledge he may  
25 have obtained at any time excluding counsel.

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2 MR. BENEDICT: That's right.

3 A I believe most of the knowledge, if not all of it,  
4 was obtained within the last week from counsel.

5 Q In response to my last question, you  
6 indicated that most, if not all of the information you  
7 had about this incident you obtained for the first time  
8 from your counsel in the last week.

9 What did you know prior to your meetings  
10 with counsel? What can you remember?

11 A I cannot disassociate what I knew prior to meeting  
12 with counsel with what I learned with counsel.

13 Q Did you know prior to your meetings with  
14 counsel that this incident occurred when the reactor was  
15 critical?

16 A No, I did not.

17 Q Did you know prior to what you learned from  
18 counsel that this event occurred with the reactor  
19 coolant pumps on?

20 A No, I did not.

21 Q You don't recall whether you knew anything  
22 about the status of the reactor coolant pumps in this  
23 incident?

24 A I don't recall.

25 Q Or the status of the core?

Mehler

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A I don't recall if I knew the status of the system.

Q Do you recall whether you knew whether it was during start-up procedures or during the start-up period on Unit 2?

A I don't recall when it occurred.

Q You don't recall knowing whether it occurred with fuel loaded or without fuel?

A I don't recall if I knew that prior to last week or not.

Q Do you recall whether you knew the volume or approximate volume of the steam generated in the primary system outside of the pressurizer?

MR. GLASSMAN: Objection.

We haven't used the word "steam" so far. I thought we used bubbles or something to that effect. Just to be consistent.

Q When you spoke of bubbles in the system, did you mean bubbles that were composed of water in its vapor phase?

MR. GLASSMAN: I am not sure that the witness gave an answer regarding any recollection of this. I was talking about the questions that were asked by counsel.

MR. BENEDICT: Could you read back the

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question?

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(Record read)

3

(continued on next page)

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2 Q Is it your recollection of the event that  
3 we have been discussing, the one event that you recall  
4 in which steam formed in the reactor primary system  
5 outside of the pressurizer, is it your understanding that  
6 during that period bubbles formed within the primary  
7 system and those bubbles were composed of saturated  
8 or of water in its vapor phase?

9 MR. GLASSMAN: You are asking for the  
10 witness' current understanding?

11 MR. BENEDICT: I am asking for what he  
12 knew prior to his discussions with counsel.

13 A I don't recall if I knew what it was.

14 Q Did you know prior to your discussions with  
15 counsel that saturated temperature and pressure  
16 relationship had been reached in the primary system  
17 outside of the pressurizer?

18 A I don't recall.

19 (Discussion off the record between the  
20 witness and counsel.)

21 Q If I recall the questions and answers that  
22 preceded, you did say that you knew there had been an  
23 event in which bubbles had been formed in the reactor  
24 coolant system outside of the pressurizer, is that  
25 correct?

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MR. GLASSMAN: When?

Q At any time excluding the knowledge he obtained from counsel in preparation for this deposition.

A I believe my answer said that I was aware of it occurring one time before, and I was not sure if I was aware of that prior to March 28th or after March 28th.

Q Right. That is my recollection as well. What is the event? Describe in the terms that you can recall the information you knew prior to your conversations with counsel about this event.

MR. GLASSMAN: I think that has been asked

and answered but I will permit him to answer.

A I don't recall the conversation that occurred other than I was aware that it occurred sometime.

Q You used the word "conversation" in your answer. Did you mean conversation?

A It was a conversation.

Q You learned about this incident in a conversation with someone?

A Yes.

Q Other than counsel?

A Yes.

Q You don't recall whether this conversation

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2 occurred before or after the Three Mile Island accident  
3 on March 28th?

4 A That's correct.

5 Q Do you recall who that conversation was with?

6 A I believe it was with Ted Illijes.

7 Q Could you identify Mr. Illijes?

8 A He is a CRO in Unit 2.

9 Q Is he a control room operator who is assigned  
10 to your shift?

11 A No, he is not.

12 Q Mr. Illijes holds a license, is that correct?

13 A At the time he held a CRO license. I believe  
14 Mr. Illijes now is a foreman in Unit 2. I am not sure  
15 that is a fact.

16 Q Do you know if Mr. Illijes is still employed  
17 by Metropolitan Edison?

18 A The last time I recall he was.

19 Q What do you recall, in words or substance,  
20 was said during that conversation with Mr. Illijes?

21 A I don't recall the substance of the conversation  
22 other than it was mentioned that we had voids in the  
23 hot legs.

24 Q Do you recall whether he described anything  
25 about the status of the system at the time that these

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voids occurred?

A I don't recall.

Q When Mr. Illijes uses the words or conveyed to you the information that there were voids in the hot legs, did you understand him to mean that there were voids composed of steam within the otherwise liquid water which filled the primary system outside of the pressurizer?

A I don't recall the actual words that were spoken, whether he used steam, gas, voids, bubbles, et cetera.

Q Did you understand him -- I appreciate that. Did you understand him to mean, however, that these voids were composed of steam as opposed to being composed, for example, of nitrogen gas?

MR. GLASSMAN: We are talking about the voids in the hot legs?

MR. BENEDICT: Yes, the ones that Mr. Illijes and Mr. Mehler discussed.

A You are asking what I assumed --

Q What you understood.

A And what I assumed during our conversation.

MR. GLASSMAN: So it is clear, we are not asking for your assumptions or speculation. We are asking for your recollection and your

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understanding, if you recall it.

A I do not recall.

Q You did understand that he was telling you there had been voids in the hot leg, is that correct?

A I am not sure he used the word "voids."

Q I don't mean to suggest that he did. I only mean to say your understanding was there were voids as a result of what he said, whatever it may have been, that there were voids in the hot legs?

A That was my understanding at the time.

Q Did you have any understanding at the time as to what those voids were caused by?

A No, I do not recall.

Q Did you have an understanding at the time that those voids were caused by saturated conditions existing in the reactor coolant system?

A I don't recall.

Q Reviewing document or Exhibit 246 which is headed "Subject: Reactor Trip/ES Incident of 4/23/78," is the incident described in this report as occurring on April 23, 1978, the incident that you and Mr. Illijes were discussing?

MR. GLASSMAN: Objection. The witness said he didn't recall receiving this document.

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2 Therefore, it is inappropriate for him to now  
3 compare events, what he recalls of a conversation  
4 and something described in a part of the document.

5 Q Seeing this document today does not  
6 refresh your recollection that the incident that  
7 Mr. Illijes was discussing did or did not occur on  
8 April 23, 1978?

9 A I don't know what incident Mr. Illijes was talking  
10 about.

11 (Discussion off the record between the  
12 witness and counsel.)

13 THE WITNESS: Could you read back the last  
14 answer.

15 (Record was read back.)

16 THE WITNESS: Could I clarify that?

17 MR. BENEDICT: Mr. Mehler and his counsel  
18 have had a conversation in which Mr. Mehler's  
19 counsel advised him that whatever it was they were  
20 talking about would be a good statement to put on  
21 the record. I think it is inappropriate at this  
22 point to volunteer statements, although I have  
23 certainly no objection to Mr. Glassman preserving  
24 that issue for clarification on cross-examination.

25 MR. GLASSMAN: I would like to note that

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2 I did not say that anything was good or bad to  
3 put on the record. The witness made a statement  
4 to me which appeared to be a clarification, and  
5 I asked whether he would want to put that on the  
6 record, and he said he did, and therefore he  
7 apparently would like to clarify the statement.

8 MR. BENEDICT: I disagree categorically  
9 with what you said. You did say that would be  
10 a good thing to put on the record.

11 I think we should move ahead and preserve  
12 Mr. Mehler's comment for your appropriate  
13 cross-examination.

14 MR. GLASSMAN: There is no cross-examination  
15 here. Mr. Mehler would like to clarify his last  
16 testimony and I think he should be permitted to  
17 do so.

18 Would you like to make a clarification?

19 MR. BENEDICT: I will move to strike whatever  
20 he says as nonresponsive to any question since  
21 there isn't a question pending, and I suggest I  
22 have no objection to your clarifying the record,  
23 I expect you to on your cross-examination.  
24 That is part of your privilege. It is my  
25 opportunity to examine as I see fit at this point.

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2           You may make appropriate objections. Telling  
3 the witness to put a statement on the record is  
4 not an appropriate objection.

5           MR. GLASSMAN: I didn't tell him to do  
6 anything. If the witness would like to make a  
7 clarification apparently of his last testimony,  
8 I think he should be permitted to do so if he  
9 wishes.

10           Mr. Mehler?

11           MR. BENEDICT: I object.

12           THE WITNESS: As I stated in the beginning  
13 that I was not sure that I heard of this incident  
14 from Ted Illijes, I would like to clarify the  
15 last statement that I made about Ted Illijes if  
16 I heard it from Ted Illijes. I don't want to  
17 drag him into this.

18           MR. BENEDICT: I think if what you are saying  
19 is that you are not positive it was Mr. Illijes  
20 and you simply -- that is your best recollection  
21 at this point, I think the record was clear on  
22 that. I appreciate that point.

23           However, I think it is appropriate to note  
24 that the answer is not responsive to any question  
25 and therefore is inappropriate at this point in

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the record.

MR. GLASSMAN: The record is whatever it is. Apparently, counsel prefers to have unclear testimony. We prefer to have clear testimony.

MR. BENEDICT: As I said, anything that you feel is unclear, it is your responsibility as counsel to your client to clarify it on cross-examination. It is not only not your responsibility but it is inappropriate to clarify it during mine.

MR. GLASSMAN: We will have our views.

Q I would like to show you a document that has been previously marked as B&W Exhibit 175 which is Volume 2 of the startup log produced to us by your client, and I would like to refer you to the page numbered 06073.

MR. GLASSMAN: Whose client are we referring to, the witness' or mine?

MR. BENEDICT: It was produced to Met Ed by Met Ed's counsel.

MR. GLASSMAN: This document was shown to him earlier in his testimony.

MR. BENEDICT: Yes, it was. It is indeed the same page.

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Q Referring to a statement that appears under the entry listed as "September 9, 1977," the statement reads -- it starts the fifth line down from the September entry, "Closed RC-V137 and applied nitrogen to the pressurizer. The pressurizer level came down proving there was a steam bubble in each of the hot legs."

Does that refresh your recollection that the incident which you recall discussing with someone, whom your best recollection now is Mr. Illijes, was an event which occurred during startup on or about September 8 or 9, 1977?

A No, it does not.

(Continued on the following page.)

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2 Q Going back to B&W Exhibit 246, reviewing  
3 the text that appears on page 2 and 3 headed "Synopsis  
4 of Event," the statement starting in the second  
5 paragraph which reads, "When the reactor tripped the  
6 turbine tripped causing a very rapid pressure  
7 increase in the B OTSG" -- that means once-through  
8 steam generator, is that correct? --

9 A Yes.

10 Q -- "and a slightly slower pressure increase  
11 in the A OTSG."

12 Then moving to the first sentence in the  
13 fourth paragraph on page 2, "The 4 B side main steam  
14 safety valves and 1 A side main steam safety valve  
15 failed to properly reseal."

16 Then reading the entire final paragraph on  
17 this page, "The safety valves failing to reseal  
18 coupled with overfeeding caused a rapid depressurization  
19 and cooldown of the reactor coolant system. The RCS  
20 went from 583F to 464F in three minutes. The RCS  
21 shrinkage from the cooldown caused the pressurizer to  
22 drop below the indicated level range approximately  
23 one minute after the reactor trip. Due to the rapid  
24 depressurization of the RCS, SFAS" -- safety features  
25 actuation system? --

2 A Yes.

3 Q -- "safety injection occurred approximately  
4 one minute after the reactor trip."

5 Rather than asking you to read over the  
6 entire two pages, I tried to pick sentences that  
7 summarize portions of this accident.

8 Do these instances or anything else that  
9 you have seen on the first two pages of the document  
10 or anything else you have looked at in the course of  
11 your review refresh your recollection as to knowledge  
12 that you had about this incident prior to the accident  
13 at Three Mile Island?

14 A No, it does not refresh my recollection.

15 Q You cannot identify this accident as being  
16 one that you knew about prior to the accident on  
17 March 28th in 1979?

18 MR. GLASSMAN: I think that had been asked  
19 and answered.

20 A I am not aware of this document. I was aware  
21 of failures of the safety valves sticking open and  
22 not reseating.

23 Q Were you aware of that incident prior to  
24 the accident at Three Mile Island?

25 A I don't recall when it occurred, so I cannot state

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2 definitely. I would have to say it happened prior  
3 to the accident, because we haven't been at power  
4 since.

5 Q I am not questioning whether the incident  
6 actually happened prior. I was questioning rather  
7 your knowledge of the incident and when you came to  
8 know of the incident.

9 MR. GLASSMAN: The question is directed  
10 to whether you knew of this incident, whether you  
11 recall that you knew of the incident at any time  
12 prior to the accident.

13 In other words, whether you knew of it at  
14 any time prior to the accident.

15 A I was aware the steam valves failed to reseal  
16 prior to the accident.

17 Q Turning to page 3 of B&W Exhibit 246 and  
18 looking at the next to last paragraph on that page,  
19 reading that paragraph, "Calculations performed  
20 immediately after the event and subsequent chemistry  
21 analyses showed that the core remained covered at all  
22 times. Although the bubble left the pressurizer  
23 and went into one or both hot legs, the hot leg  
24 with the bubble, if only one had it, was at least  
25 still filled with water half way up the height of the

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2 leg. If both hot legs had a bubble, then the legs would  
3 have been filled three-quarters of the way up the legs."

4 Were you aware of an incident prior to the  
5 Three Mile Island accident in which the bubble left  
6 the pressurizer and went into one or both of the hot  
7 legs?

8 MR. GLASSMAN: Is the question whether he  
9 is now aware of such a prior incident or whether  
10 Mr. Mehler was aware at some time prior to the  
11 accident that something had occurred?

12 MR. BENEDICT: I am starting with whether  
13 or not you are aware that has occurred at any time.

14 MR. GLASSMAN: Whether you are now aware of  
15 it?

16 MR. BENEDICT: Right, and excluding what  
17 you read here today. I am not asking you to  
18 educate yourself at this point.

19 A I do not know when I became aware of one  
20 incident where there was voids formed in the hot legs,  
21 whether it was prior to or after the accident.

22 Q The incident that you just spoke of, the  
23 one incident, that is the incident we discussed before  
24 which you believe you learned of in a conversation?

25 A Yes.

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Q Is your recollection of what you learned about that incident, or does your recollection of what you learned about that incident indicate that it was an incident in which the pressurizer emptied?

MR. GLASSMAN: I object to the form of the question. It sounds like you are asking for an interpretation of what his recollection means or something rather than a recollection of any further details of the event.

MR. BENEDICT: Let's hear the question.

(Question read by the reporter.)

MR. GLASSMAN: I object to the question and direct the witness not to answer in its present form.

By use of the word "indicate," it seems to be as phrased you are asking the witness for a current interpretation or evaluation or something to that effect of the meaning of some prior recollection.

MR. BENEDICT: You are going to direct the witness not to answer because the question is improper as to form?

MR. GLASSMAN: It is also misleading. It is asking for a current evaluation apparently of

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2 what some prior testimony or some prior  
3 recollection might now mean or something to  
4 that effect. It is very confusing. I think  
5 what you are trying to get at is his  
6 recollection of further details which I will  
7 permit him to answer.

8 MR. BENEDICT: I press my question.

9 MR. GLASSMAN: I direct you not to answer  
10 in the present form.

11 Q Is it your recollection that the incident  
12 which you learned of in the conversation concerning  
13 the existence of bubbles or voiding in the reactor  
14 coolant system was an event in which the pressurizer  
15 bubble left the pressurizer and went into one or both  
16 of the hot legs?

17 A I don't recall if the pressurizer was even  
18 mentioned.

19 Q Is it your understanding of the steam  
20 supply system at Unit 2 that steam can form in the  
21 reactor coolant system without having it be drawn out  
22 of the pressurizer?

23 MR. GLASSMAN: You are asking for an  
24 assumption or speculation?

25 MR. BENEDICT: I am asking for his

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understanding as a senior reactor operator  
licensed individual and shift supervisor  
on the two units on site at Three Mile Island.

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MR. GLASSMAN: You are asking for his  
current understanding after the accident?

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MR. BENEDICT: I am asking for his  
understanding of how the system works.

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(Question read by the reporter.)

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A My previous training from both Met Ed and B&W  
says that nucleate boiling does occur in the core along  
the fuel pins, so if nucleate boiling occurs along  
the fuel pins, there would be steam formed in the  
core while we were at power, so it would be other  
than the pressurizer.

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Q Excluding for the moment nucleate boiling,

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is it your understanding that saturated conditions  
can be reached in the reactor coolant system at  
Unit 2 and steam voids created thereby without drawing  
the bubble leaving the pressurizer and going into one  
or both of the hot legs?

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MR. GLASSMAN: Your understanding as of  
today?

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MR. BENEDICT: That is right.

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A As of today, prior --

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2 Q As of today, what do you understand today?

3 A Yes, it is possible as of today.

4 Q Did you understand prior to the  
5 accident at Three Mile Island, excluding again  
6 nucleate boiling, that saturated conditions could  
7 exist within the reactor coolant system outside of the  
8 pressurizer and result in steam voids occurring within  
9 the reactor coolant system without the bubble leaving  
10 the pressurizer and going into one or both of the hot  
11 legs?

12 A I don't recall if I was aware of that prior to  
13 March 28th, 1979.

14 (Recess taken.)

15 BY MR. BENEDICT:

16 Q Returning to the questions and answers  
17 given immediately before the break, you cannot  
18 recall whether, as a shift supervisor, senior  
19 reactor operator licensed on both Units 1 and 2, that  
20 you knew prior to March 28th, 1979 that saturated  
21 conditions could exist in the reactor coolant system  
22 outside of the pressurizer resulting in steam voids in  
23 the reactor coolant system where the bubble in the  
24 pressurizer did not leave the pressurizer and go into  
25 one or both of the hot legs?

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MR. GLASSMAN: It has been asked and answered, and the predicate in your question regarding experience of the witness adds nothing to the question.

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MR. BENEDICT: I will press the question.

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MR. GLASSMAN: Let's go on.

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I direct him not to answer.

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MR. BENEDICT: You direct the witness not to answer a question on this fundamental issue. I am entitled to ask a question more than once when I seek to jog the witness' memory.

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I think it is outrageous that you are interfering with the deposition this way.

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MR. GLASSMAN: Read back the question.

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(Question read by the reporter.)

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MR. GLASSMAN: As I noted, in fact, as the question itself notes, this was gone over just before the break, and the only purpose I can see in this question is to harass the witness, and to do that by implying that a particular title should present a different recollection.

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I direct the witness not to answer that question.

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If you would like to rephrase it and ask it

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once again without any assumptions in there.

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MR. BENEDICT: I will press my question.

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I absolutely disagree with you completely

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that this is improper. I am entitled to set

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forth things that I believe might assist the

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witness in refreshing his recollection.

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I press for an answer to this question.

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We will save a lot of time. If you think he is

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going to give the same answer, that is fine,

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let him give the same answer. Let him give a

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different answer.

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MR. GLASSMAN: You want to ask him whether

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the fact that being a shift supervisor refreshes

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his recollection.

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MR. BENEDICT: I want an answer to my

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question. It can be answered yes or no or he

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can answer in a longer-winded fashion.

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MR. GLASSMAN: If you rephrase the

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question --

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MR. BENEDICT: I press the question as

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it is presented.

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MR. GLASSMAN: I direct him not to answer.

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I think it is improper, but continue.

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MR. BENEDICT: I would like to hear the

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question back.

(Question read by the reporter.)

MR. BENEDICT: You instruct the witness  
not to answer that question?

MR. GLASSMAN: I have stated my objection  
and direction and the ground. If you rephrase  
it, I will let him answer.

(Continued on next page.)

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Q What licenses did you hold on the day of the accident at Three Mile Island?

A I held senior operator's license for both 1 and 2.

Q What was your position at Metropolitan Edison on the day of the accident?

A I was a shift supervisor.

Q Had you held that position since April 1st of the year preceding?

MR. GLASSMAN: Asked and answered.

A Yes.

MR. BENEDICT: You are the person who has asked me to rephrase a perfectly proper question.

I am attempting to satisfy so we will let Mr. Mehler go home. If we don't get an answer to the question, I may find it necessary to go to a judge and bring Mr. Mehler back and maybe seek costs.

You are the person who started this silliness.

MR. GLASSMAN: We will let you continue. If you feel you have to reask the question over and over again, it is a waste of time.

Mehler

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2 Q Did you know prior to March 28th, the  
3 day of the accident at Three Mile Island, that  
4 saturated conditions could exist in the reactor coolant  
5 system outside of the pressurizer resulting in  
6 steam voids in the reactor coolant system where the  
7 bubble in the pressurizer did not leave the  
8 pressurizer and go into one or both of the hot legs?

9 MR. GLASSMAN: Could I have it read back,  
10 please.

11 (Record read.)

12 A If I understand the question correctly, I  
13 believe previously it was asked before, and I stated  
14 that I was aware that nucleate boiling does occur  
15 within the core which would indicate that steam does  
16 form in other places other than the pressurizer.

17 Q Excluding nucleate boiling, did you  
18 have an understanding about the existence of saturated  
19 conditions and steam voids within the reactor coolant  
20 system in a situation where the bubble in the  
21 pressurizer did not leave the pressurizer and go into  
22 one or both of the hot legs prior to the accident at  
23 Three Mile Island?

24 A I don't recall if I was aware that that could  
25 occur prior to March 28, 1979.

Mehler

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Q Returning to Exhibit 246 and looking to page 10 for the moment which is simply labeled "Conclusions," and turning to page 11 which is headed "Operator Action," it says at numeral 8 under "Operator Action," "The operators' action in response to the E.S. in both cases was very good. The E.S. was quickly bypassed to regain control and the DHVB's were promptly shut to keep from contaminating the R.C. system."

Is it your understanding that prior to the Three Mile Island accident there had been a problem on Unit 2 with contaminating the RC system?

MR. GLASSMAN: Is the question directed to Mr. Mehler's current understanding?

MR. BENEDICT: Yes.

(Record read.)

A I was aware that prior to March 28th that there were incidents where I believe it was sodium hydroxide was put into the system.

Q How was the sodium hydroxide introduced to the primary system?

MR. GLASSMAN: You are asking for Mr. Mehler's current understanding?

MR. BENEDICT: Yes.

Mehler

1  
2 A It was introduced into the system when an ES  
3 occurred and DHV8-A and B opened. I believe it was  
4 8-A and B. That in turn would put the sodium  
5 hydroxide tank to the suction, if I can recall  
6 correctly, to the makeup pumps, and to the decayed  
7 heat removal pumps.

8 Q Does that mean on an  
9 engineered safety features initiation of high  
10 pressure injection that that had at least once prior  
11 to the Three Mile Island accident resulted in  
12 introducing sodium hydroxide into the primary system?

13 MR. GLASSMAN: We are asking for Mr.

14 Mehler's current knowledge or his speculation?

15 MR. BENEDICT: I am asking for what he  
16 understands.

17 A The best that I can recall that it happened at  
18 least once.

19 Q And I am focusing rather than on just the  
20 use of the terminology that you used, you talked  
21 about an ES actuation. By that you mean an engineered  
22 safety features actuation?

23 A Yes, they are one and the same. Just the  
24 terminology that you use.

25 Q Would that include an initiation of high

Mehler

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2 pressure injection?

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MR. GLASSMAN: As a general matter?

4

MR. BENEDICT: Yes.

5

6 Q As you used it in your answer, did an  
7 ES actuation include a high pressure injection system  
8 actuation?

8

9

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MR. GLASSMAN: You are asking whether Mr.  
Mehler's recollection of some prior event  
included an actuation of high pressure injection,  
or are you asking for a general question of the  
scope of the ES?

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MR. BENEDICT: I am referring to his prior  
answer where he said he knows that an ES  
actuation occurred.

16

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Q Did that ES actuation that you remember  
include an actuation of the high pressure injection  
system?

19

20

A I do not recall specific ES actuation, but if  
you get ES, you get high pressure injection.

21

22

23

Q What is the sodium hydroxide used for?

A Sodium hydroxide is used for pH control of  
the primary system during accident conditions.

24

25

Q Does Unit 1 utilize sodium hydroxide for  
that purpose?

Mehler

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2 A Yes, it does.

3

4

Q Does it utilize sodium hydroxide by the same mechanical setup that Unit 2 does?

5

6

A It would be injected through the same type of pumps.

7

8

9

Q Had Unit 1 experienced problems with contamination as a result of the introduction of sodium hydroxide?

10

11

MR. GLASSMAN: You are asking for his current knowledge?

12

13

MR. BENEDICT: Yes.  
A Not to my knowledge, it hasn't.

14

15

16

Q To your knowledge, had there ever been an engineered safety features and high pressure actuation at Unit 1?

17

18

19

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A Not to my knowledge.

22

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Q Did you receive this document in the ordinary course of business?

24

25

A I don't recall receiving this document.

Q Do you recall ever seeing this letter

Mehler

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from Mr. Rogers to Mr. Miller before?

A No, I do not recall seeing this document.

Q Turning to page 3 of the letter marked as page 34 of this exhibit, there is a heading at the bottom of the page entitled recommendations, and it reads, "In agreement with the directions outlined for a recovery program following a similar chemistry contamination of the plant, B&W would expect concentrated effort to eliminate the current Reactor Coolant System, BWST, and auxiliary systems and piping contamination."

Prior to the accident at Three Mile Island, were you aware of any recovery program to eliminate contamination in the reactor coolant system of Unit 2?

A I don't know what they are referring to, the recovery program, so I am not aware of any action that was taken.

Q Were you aware prior to the accident at Three Mile Island that there was a concern among both people at Metropolitan Edison and B&W about sodium hydroxide contamination of the reactor coolant system at Unit 2?

MR. GLASSMAN: I don't know what you mean

1

2

by "concern." I will let him answer.

3

A I do not know if it was a concern of B&W, but

4

I do know it was a concern of the operators at the

5

Island.

6

Q In what manner did you become aware of

7

this concern prior to the accident at Three Mile

8

Island?

9

A It required time to clean the system up and a

10

lot of replacement of resins.

11

Q Was the system as it existed prior to

12

the accident at Three Mile Island on Unit 2 capable

13

of resulting in sodium hydroxide contamination of the

14

primary system without an engineered safety features

15

actuation?

16

MR. GLASSMAN: You are asking for --

17

MR. BENEDICT: His understanding of how the

18

system was designed.

19

MR. GLASSMAN: At the time?

20

MR. BENEDICT: I am asking his current

21

understanding about the system obviously has not

22

been contaminated.

23

THE WITNESS: Would you read back the

24

question.

25

Q I will restate it.

1  
2                   What sodium hydroxide contamination events  
3 were you aware of upon which the control room operators  
4 based their concern? Are you aware even today?

5       A       I don't recall which events or event that caused  
6 their concern with the sodium hydroxide in the system.  
7 All I know is that it was a major concern whenever  
8 we got sodium hydroxide into the system.

9           Q       Do you recall any event in which sodium  
10 hydroxide was introduced into the primary system  
11 by means other than through the makeup pumps either  
12 operating as makeup pumps or as in their safety high  
13 pressure injection mode?

14       A       I don't recall with any certainty any event  
15 where the sodium hydroxide was injected into the  
16 system, a specific event. I vaguely recall by the  
17 DHV8 one time.

18           Q       The DHV8 is a decay heat valve?

19       A       It says decay heat, but that would be the  
20 outlets from the sodium hydroxide tank.

21           Q       And the result of that valve being open  
22 or leaking passing fluid would be to provide sodium  
23 hydroxide to the suction of the makeup pumps?

24       A       It would provide sodium hydroxide to the suction  
25 of the makeup pumps and the decay heat removal pumps.

1  
2 Q Prior to the accident at Three Mile Island,  
3 were any steps taken to alleviate the concerns felt  
4 by the control room operators about sodium hydroxide  
5 contamination?

6 MR. GLASSMAN: Are we talking about steps  
7 by anyone at all?

8 MR. BENEDICT: Yes, that Mr. Mehler is  
9 aware of.

10 A I am not aware of any steps that were being  
11 taken.

12 Q Are you aware of changes in procedures  
13 to reduce the likelihood of sodium hydroxide  
14 contamination?

15 A I am not aware of any procedure changes that  
16 occurred.

17 Q Are you aware of any recommendations  
18 made by B&W or any other organization outside of Met Ed  
19 concerning the prevention of contamination by  
20 sodium hydroxide?

21 A I am not aware of any recommendations.

22 Q Did you make any recommendations to any  
23 person at Met Ed with respect to reducing the  
24 likelihood of contamination by sodium hydroxide?

25 A I don't recall making any recommendations.

1

2 Q Do you recall receiving any recommendations  
3 from anyone?

4 A I don't recall.

5 Q Do you recall any steps you or any of your  
6 shift personnel took in order to reduce the  
7 likelihood of sodium hydroxide contamination?

8 A I don't recall any steps that were taken to  
9 reduce the likelihood of sodium hydroxide injection.

10 Q Do you recall receiving any training  
11 from anyone on -- any Met Ed employees on the subject  
12 of reducing the likelihood of sodium hydroxide  
13 contamination?

14 A No, I don't recall any training.

15 Q Do you recall receiving any training from  
16 anyone other than employees of Met Ed on this subject?

17 A I don't recall receiving any training on this  
18 subject.

19 Q Are you aware of any changes in procedure  
20 on Unit 1 either before or after the accident with  
21 respect to the concern for sodium hydroxide  
22 contamination of the RCS?

23 A I am not aware of any changes made in Unit 1  
24 pertaining to sodium hydroxide.

25

(Continued on following page.)

1

2

Q Is the sodium hydroxide a moderator, as that term -- when I use the term "moderator," I mean as is boren, a nuclear moderator?

3

4

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A To my knowledge, it is not.

6

7

Q It is not used for that purpose in the system?

8

A No, it is not.

9

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11

Q Turning to page 12 of the B & W Exhibit 246, the next page in the conclusion section under the heading, "Philosophy" at page 12, numeral 1. reads:

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"We must understand each specific evolution and the most likely consequences of equipment failure or malfunction. We must approach evolutions with the question, "how would I respond if \_\_\_\_\_ happened."

17

18

Prior to the accident at Three Mile Island, did you hold that operating philosophy?

19

20

MR. GLASSMAN: Objection. Are you asking for knowledge, understanding, philosophy?

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MR. BENEDICT: The inability of you to think up a basis for objection, I think, demonstrates the fact that you recognize the question is appropriate. Let's get on with an answer and then we can move along.

1

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MR. GLASSMAN: If the witness knows whether he had a philosophy, I will let him answer.

3

4

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A I never heard that philosophy before, so I could never say if that was my philosophy or not.

6

7

Q Reading the paragraph I just read -- does reading the paragraph I just read refresh your recollection as to ever hearing that philosophy from anyone?

10

11

A I don't recall ever hearing that philosophy.

12

13

Q You don't recall reading it in this document?

14

A No, I do not.

15

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Q Moving to No. 2. under the "Philosophy" heading:

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"We must stop and regroup when something is marginally working or marginally understood. Adverse affects can be additive."

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21

Did you have that operating philosophy prior to the accident at Three Mile Island?

22

23

MR. GLASSMAN: Objection, but I will

let the witness answer if he can recall.

24

25

A I don't recall having that operating philosophy. I have never heard this statement before.

1  
2 Q Was it your opinion prior to the Three  
3 Mile Island accident that adverse effects can be  
4 additive?

5 MR. GLASSMAN: If you are asking for  
6 the witness' understanding at that time as to  
7 whether this was possible, I will allow him to  
8 answer, but I don't think we should be asking  
9 the witness for opinion or speculation at some  
10 time.

11 MR. BENEDICT: I am asking the witness  
12 for his opinion at a -- whether he recalls,  
13 and if he doesn't, he can answer. Whether he  
14 recalls whether he held as an operator an  
15 opinion that concerned the operation of the  
16 facility he was licensed to operate, the  
17 philosophy which was in substance that adverse  
18 effects can be additive.

19 A I don't recall having that type of opinion.

20 Q Moving to No. 3 under "Philosophy" at  
21 page 12, the document states in the last sentence of  
22 that paragraph:

23 "Thus when investigating a trip or transient,  
24 each parameter must not be analyzed with "tunnel  
25 vision," but rather must be looked at

2 independently and objectively for proper  
3 performance."

4 Prior to the accident at Three Mile Island,  
5 did you investigate any trips or transients?

6 MR. GLASSMAN: I am not sure I understand  
7 the question. Does the question relate to this  
8 particular reading or just a general question?

9 MR. BENEDICT: I have read it to lay a  
10 predicate for my questions, and I am asking him  
11 in order to continue with laying the foundation  
12 whether Mr. Mehler in the performance of his  
13 duties as a control room operator and then as  
14 a shift foreman and then as a shift supervisor  
15 had ever investigated a trip or transient?

16 MR. GLASSMAN: It sounds like you have  
17 a lot of questions and I will let him answer  
18 but I want to make sure he is answering and  
19 he has not testified that he ever saw this  
20 document you are reading from or anything  
21 he did in relation to this document, so I  
22 object insofar as there is any implication of  
23 that sort.

24 MR. BENEDICT: I am not seeking  
25 implications. I am seeking answers.

2 (Record read.)

3 A I don't recall investigating any trips or  
4 transients.

5 Q On Tuesday of this week, didn't you tell  
6 us that you prepared a report at the request I believe  
7 it was of Mr. Floyd with respect to a transient?

8 A I prepared a report on the condensate polishers,  
9 yes.

10 Q Was that at the request of Mr. Floyd?

11 A Yes.

12 Q Was that in response to an incident  
13 which occurred at Unit 2?

14 A Yes, it was.

15 Q Would you have considered the incident  
16 concerning the bypass valves on Unit 2 a trip or  
17 transient?

18 A I always considered a trip or transient something  
19 that pertains to the primary system.

20 Q If the result of an event in part of  
21 the secondary system is to lead to an upset in the  
22 primary system, would that initiating cause in the  
23 secondary system be part of the trip or transient  
24 in your understanding?

25 A It would be included as the initiating event.

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Q In the course of any investigation or preparation of reports you did with respect to this one you recall, was it your philosophy at that time that each parameter must not be analyzed with tunnel vision but rather must be looked at independently and objectively for proper performance?

MR. GLASSMAN: I object because it seeks the philosophy rather than the conduct of the witness, but I will let him answer.

A I don't recall this statement about tunnel vision. Whenever I was called upon, and I only recall one instance, I always put down to the best of my ability what I thought happened and my conclusions or recommendations to keep it from happening again. I do not know if that encompassed "Philosophy."

BY MR. BENEDICT:

Q Not limiting my questions to this particular document, have you ever been told that when investigating a trip or transient each parameter must not be analyzed with tunnel vision but rather must be looked at independently and objectively for proper performance?

A I don't recall being told that.

Q You don't remember reading it in any

1

2 other source other than this document?

2

3

A I don't recall.

4

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Q And the three passages which I have read to you from numerals 1, 2, and 3 under "Philosophy," they don't refresh your recollection that you received this document or reviewed it at sometime?

9

A No, it does not.

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Q Turning to page 13 and yet another section under the conclusions category, there is a sub-category labeled "Other," and numeral 2. reads:

"The number of inoperable alarms in control room needs to be reduced to a manageable level."

What is your recollection of the approximate number of alarms that were inoperable in the Unit 2 control room at or about May of 1978?

MR. GLASSMAN: Objection. Again, insofar as the question appears to attempt to relate an answer here to a portion of a conclusion in a document Mr. Mehler does not recall having even seen.

MR. BENEDICT: I have only asked him what his recollection is of the approximate

1  
2 number of alarms that were inoperable in the  
3 Unit 2 control room at or about May of 1978.

4 MR. GLASSMAN: You may ask him that  
5 question, but I object to the prior one which  
6 inappropriately seems to relate the question to  
7 something that he does not recall.

8 (Record read.)

9 A I don't have the slightest idea how many alarms  
10 were inoperable three years ago.

11 Q During the period from your assuming  
12 shift supervisor's responsibility in April of 1978  
13 through the day of the accident, was it your view  
14 that there was any period during that time when the  
15 number of inoperable alarms in the Unit 2 control  
16 room were at an unmanageable level?

17 MR. GLASSMAN: I object so far as it  
18 calls for some mental state. I will ask for  
19 his knowledge and -- you are allowed to ask  
20 for his knowledge.

21 MR. BENEDICT: I will restate the  
22 question.

23 BY MR. BENEDICT:

24 Q During the period beginning with your  
25 assignment as a shift supervisor in April 1978

1  
2 through the day of the accident, was there any time  
3 when the number of inoperable alarms in the Unit 2  
4 control room was at an unmanageable level?

5 MR. GLASSMAN: Objection. I am not  
6 clear on what the word "unmanageable" means,  
7 but if he understands, he can answer.

8 A I don't recall any time that the alarms were  
9 in an unmanageable condition.

10 Q Do you recall at any time from your first  
11 introduction to Unit 2 through to the day of the  
12 accident hearing a complaint by any licensed  
13 individual that there were too many inoperable alarms  
14 in the Unit 2 control room?

15 A I don't recall hearing that complaint.

16 Q As a shift supervisor, would your shift  
17 control room operators and shift foreman come to you  
18 with comments and complaints?

19 MR. GLASSMAN: You are asking whether  
20 they did or whether they would?

21 Q Did they?

22 A They would come to me with their complaints.

23 Q Do you recall any complaint by them with  
24 respect to alarms -- broadening the question from  
25 just inoperable alarms; do you recall any complaint

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received from any of your shift licensed personnel relating to the alarms in the control room in Unit 2?

A None that I can recall.

Q Were the complaints that you received from your licensed personnel on your shift ever presented to you in writing?

A Are you referring to complaints on the alarms?

Q Generally.

A I don't recall any complaints in writing.

Q Do you recall ever hearing a complaint by someone, licensed person at the site, which you recommended he put in writing and submit to you or to another?

A I don't recall making that recommendation.

Q Were the majority of the concerns or complaints that were voiced to you by licensed personnel on the site whether at Unit 1 or Unit 2 voiced to you in conversations as opposed to being in writing?

Were the majority of the complaints in oral form?

A I don't recall any incident where any gentleman came up and said I have a complaint and here it is.

In general conversation, people always expressed their

views. I don't recall any general conversations right now that I could be specific about where their views were expressed.

Q I didn't before and I don't mean now to limit my questions to someone who would come to you and say I have a complaint and here is my complaint. When I use the word "Complaint," it is to include concerns to you expressed to you about the facility, either seeking your guidance or seeking advice on how this problem should be handled within the hierarchy at Met Ed.

Is that how you answered my questions?

A I have a very hard time determining what you consider a complaint.

MR. GLASSMAN: The question is unclear.

A I think complaints where the gentleman on the shift complained about making the door to the bathroom a key-locked door, if you want to consider that a complaint, yes, I had that complaint.

Q Do you remember any complaints concerning -- and I do consider that a complaint. Do you remember any complaints concerning alarms. Do you remember any concerns being expressed to you about the alarm system within the Unit 2 control room by

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any licensed personnel?

A I don't remember any specific complaints on the alarms. I have heard complaints that the alarm horn was too loud, and --

Q Do you recall any other complaints you have heard with respect to the alarms?

A I don't recall any.

Q Turning to numeral 3. under the "Other" category, it reads:

"More alarm acknowledgement capability in control room is needed."

In the Unit 2 control room, how are alarms acknowledged?

MR. GLASSMAN: Objection, so far as it attempts to relate a question to some conclusion in a document that Mr. Mehler says he does not recall.

If you have a particular question as to something regarding acknowledgement of alarms, please go ahead and ask it.

MR. BENEDICT: I have asked a non-leading question to the witness asking him to tell me how alarms are acknowledged within the Unit 2 control room. If you are expressing

1  
2 -- if you have grave concern about this  
3 document and its evidentiary value, you are  
4 showing it by these constant objections. If  
5 you are not concerned about it, I think we can  
6 speed things along if you let me ask my proper  
7 questions. You are not voicing any objection.  
8 You are simply talking.

9 MR. GLASSMAN: I am voicing an objection.  
10 It will speed things along if you ask a proper  
11 question. I have no objection to that.

12 MR. BENEDICT: Please reread the  
13 pending question and it will be impossible for  
14 you to tell me how that question is improper.

15 (Record read.)

16 MR. GLASSMAN: I will allow the witness  
17 to answer the question in the Unit 2 control  
18 room, how are alarms acknowledged.

19 Q Proceed. You are answering the question  
20 as it appears on the record.

21 A When the alarm comes in, the operator will see  
22 what alarm came in, and then depress the "Acknowledge"  
23 pushbutton for the alarm, and then the alarm will  
24 stay in solid and the horn will stop.

25 Q When you say "the alarm will stay in

1  
2 solid,"the annunciator window which flashes initially  
3 upon receipt of the alarm will then go to a  
4 bright steady light?

5 A It will go to a steady light, yes.

6 Q And there is an "Acknowledgement" button  
7 on the panel in the control room.

8 A I haven't been in Unit 2 for at least the last  
9 year, possibly longer, and I don't want to state here  
10 where all the "Acknowledge" buttons are.

11 Q Do you know whether Three Mile Island  
12 Unit 2 has more than one alarm acknowledgement push-  
13 button as you call them?

14 A To the best of my recollection, yes.

15 Q Do you know whether the control room as  
16 it was originally designed and utilized commencing  
17 with the start up of Unit 2 had more than one alarm  
18 acknowledgement pushbutton?

19 A To the best of my recollection, yes.

20 Q Is the effect of the alarm "Acknowledgement"  
21 button -- is the effect isolated to a single alarm,  
22 or does it affect all alarms that are sounding at  
23 the time it is depressed?

24 A Right now I cannot answer that for Unit 2,  
25 because I am not sure any more of where all the

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2 "Acknowledge" pushbuttons are, so I prefer not to  
3 answer that because I couldn't give a factual  
4 answer.

5 Q You cannot say at this point whether on  
6 Unit 2 prior to the accident at Three Mile Island  
7 the depression of an alarm acknowledgement button  
8 would have the effect of acknowledging all alarms  
9 that were sounding at that time or whether it would  
10 be more limited in its effect?

11 A I cannot answer that. I have to go over and  
12 look.

13 Q Are you aware of any changes that were  
14 made in the Unit 2 control room with respect to the  
15 acknowledgement of alarms between or from the time  
16 you came on as a shift supervisor in April through  
17 to the day of the accident on March 28?

18 A I am not aware of any changes made to the  
19 annunciation system in Unit 2.

20 Q Does that answer also apply to the  
21 acknowledgement of the annunciation system?

22 A Yes.

23 (Continued on the next page.)

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Q Turning to page 14 of Exhibit 246 which is headed "Recommendations/Action Items," and then turning to page 15 under the subheading "Equipment Changes," reading at numeral 4, "Solve relief valve blowdown problems - GPUSC Toole - prior to criticality."

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Are you familiar with an individual employed by GPU Company whose name is Toole?

9

10

A I am familiar with two individuals whose last name is Toole.

11

12

Q Who would those two people be?

A That would be a Ron Toole and a Mike Toole.

13

14

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Q Do you know whether either or both of those Mr. Tooles work for GPUSC or worked in May of 1978 for GPUSC?

16

17

A May 1978, Ron Toole, I believe, worked for GPU, and I assume SC --

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19

Q Service Corporation.

A I believe Ron Toole did.

20

21

Q Is that Ron, R-o-n?

A Yes. I think his first name is Ronald.

22

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Q Yes.

What changes were made to relief valves, if any changes were made, on the TMI-2 facility during the period that you were a shift supervisor

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starting in April 1978 and ending, of course, on the day of the accident on March 28, 1979?

A The original installed relief valves were removed and replaced by Dresser's relief valves.

Q Which relief valves are those?

A I believe they were made by Lonagan.

Q I meant what function do they serve on the reactor. Are they on the secondary side?

A Yes.

Q Those are mainstream relief valves; is that right? I am not referring to what is here since you don't remember this document. I am referring to what your recollection is of changes that were made on the system.

A The relief values that I am referring to are the relief valves that were on the secondary side of the steam generators.

Q Aer the relief valves you recall being replaced by Dresser valves, would I be accurate in calling them the main steam relief valves?

A Yes, you would.

Q Do you know whether any changes were made to the pilot operated relief valve on the primary system during the period that you were a

1

2 shift supervisor on unit 2?

2

3

A I am not aware of any changes made to the  
4 pilot operated relief valve.

4

5

Q Going down to number 12 which reads,  
6 "Provide some indication for main steam relief  
7 valve position. A temporary microphone from the  
8 vicinity of the valves to the control room has been  
9 suggested. In this way the operator could at least  
10 detect independent of analyzing console indication  
11 that the relief valves are open. GPUSC - Toole -  
12 prior to startup."

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Does reading this refresh your recollection  
that the addition of microphones which we spoke of  
on Tuesday to the vicinity of the main steam relief  
valves was done in response to the incident herein  
described as occurring on April 23, 1978?

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MR. GLASSMAN: Objection. I direct the  
witness not to answer. The witness has not  
said that he knows anything about the event  
herein described.

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MR. BENEDICT: You direct the witness not  
to answer?

MR. GLASSMAN: Yes.

Q Does reading the portion which I read

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2 to you and which you have been able to read along  
3 with me at page 15, numeral 12, does that refresh  
4 your recollection that the microphone was added  
5 in response to a failure of one or more main steam  
6 relief valves on the unit 2 facility?

7 A Reading this, I guess paragraph 12, does not  
8 refresh my recollection.

9 Q It is your recollection, is it not,  
10 that microphones were added in response to a failure  
11 of one or more main steam relief valves on unit 2  
12 whether or not that recollection is refreshed by  
13 this passage?

14 A I am aware that a microphone was added to  
15 the area where the main steam relief valves are  
16 installed, and the receiver or speaker is mounted  
17 in the control room. It was a temporary installation.

18 Q Is it your understanding that that  
19 installation was provided in response to an incident  
20 which occurred at unit 2 where one or more main steam  
21 relief valves failed open?

22 A I don't know why it was installed, in response  
23 to what.

24 Q Do you recall whether the microphone was  
25 installed after you became a shift supervisor?

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A No, I don't recall that. I just recall that it was installed and the brown box laying up behind the panel.

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Q Was the temporary installation of the microphone, as you described it, still in place on the day of the accident on March 28, 1979?

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A I don't know if it was or wasn't.

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Q What indications of main steam relief valve position existed at Three Mile Island unit 2 on the day of the accident in March of 1979?

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A I don't recall if there was any indication for the main steam valves on the secondary side in unit 2 on March 28, 1979.

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Q Aside from the addition of the temporary microphone, were any other changes made to the unit 2 control room which related to the determination of the position of the main steam relief valves prior to the Three Mile Island accident?

20

21

A None that I recall.

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Q Turning to page 16 in the section headed "Recommendations/Action Items," there is a subheading labeled "Philosophy." Numeral 1 reads, "We must slow down and proceed forward deliberately and

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2 correctly. Senior station management must convey  
3 this philosophy to shift personnel - G.P. Miller/  
4 R.J. Toole prior to start up."

5

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7 The position which you held as a shift  
8 supervisor, did that position make you a shift  
9 personnel?

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MR. GLASSMAN: Objection to this

continuation of trying to relate a paragraph  
in a document that the witness does not recall  
having seen to some other question. If you  
have questions to ask this witness, please go  
ahead and ask them, but I think we are coming  
to an end of this. We have spent an awful lot  
of time on this document, but if you have a  
question, ask him. I object to your trying  
to create a record that relates it to something  
else the witness does not recall,

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Q During the period from April 1st, 1978  
to March 28, 1979, were you a member of the shift  
personnel for the TMI facility?

A Yes.

Q Was it ever conveyed to you that we must  
"slow down and proceed forward deliberately and  
correctly," or a concept in substance similar to that?

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A I don't recall that.

Q You don't recall any time, whether it was during the time you were a shift supervisor or sometime prior to that?

A No, I don't recall.

Q Moving down the page to the heading, the subheading labeled "Training," and reading from numeral 1, "Review this transient and all other trips and transients to date with operating shifts. Such reviews should be conducted when feasible in front of the controls to get maximum benefit from the situation. Floyd - May 10."

Are you aware of any person working for any GPU company named Floyd other than Jim Floyd?

A I believe I think he was a Vice President with the last name of Floyd. I don't know his first name.

Q Other than that, you know of no other person?

A Not at this time.

Q At any time during the period in which you were a shift supervisor, did you review or did you receive a review relating to the incident you recall involving the failure of one or more main steam relief valves?

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A I don't recall receiving a review.

Q Do you recall receiving a review of the incident relating to the loss of power which led to an open PORV?

A No, I do not.

Q Do you remember reviewing any incident which involved a failure or trip of the condensate polisher on unit 2?

A I don't recall any reviews.

Q During the period in which you were a shift supervisor, did you give or receive any review of any trip or transient in front of the controls at unit 2?

A I don't recall any at this time.

(continued on next page)

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Q At any time from your arrival on the island in 1969, as I understand it, through to the day of the accident, do you remember giving or receiving a review of a trip or transient in front of the controls of either the Unit 2 Control Room --

A I don't recall giving or receiving any reviews in front of the consoles.

Q -- for either Unit 1 or Unit 2 at any time?

A Right. I have given reviews on Unit 1 that I can recall on incidents that occur, but I do not recall if they were directly in front of the console.

Q Did you give those reviews, the reviews you can recall on Unit 1, were they given prior to the accident at Unit 2?

A I don't recall any prior to the accident at Unit 2. I can only relate to those that occurred within the period of my memory right now, and that would be incidents that occurred in other plants that are reviewed with my operators, both CRO's and AO's, and I don't recall if I gave the review directly in front of the panel or not.

Q The reviews that you recall, can you place them as to time in relationship to the accident, any of them, in relationship to March 28, 1979?

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2 A I cannot put a date on any of them. I have  
3 reviewed with the crew the Crystal River incident. These  
4 are just some that I recall. The Prairie Island, I  
5 believe it is referred to, incident. There were numerous  
6 other ones that I reviewed. Those are the only two that  
7 I recall right now.

8 Q The Crystal River incident occurred in  
9 February of 1980, is that your recollection?

10 A I have no idea when it occurred.

11 Q Do you know that it occurred after the  
12 accident at Three Mile Island?

13 A Yes, I do know that.

14 Q And the Prairie Island accident, that  
15 occurred after Three Mile Island as well, did it not?

16 A To the best of my recollection, yes.

17 Q Do you recall any of these reviews that  
18 concerned incidents that occurred at one of the two  
19 Three Mile Island units?

20 A I cannot recall with any certainty that the  
21 reviews did not pertain to Three Mile Island, either  
22 Unit 1 or Unit 2. I would hate like heck to say that I  
23 reviewed something with the people and I didn't.

24 Q I understand. I want your memory. I am  
25 not asking you to speculate.

1  
2 With respect to the last questions and  
3 answers, you limited your response with respect to your  
4 remembering reviews of incidents to reviewing them with  
5 Unit 1 personnel, is that correct?

6 A Yes.

7 Q You don't recall reviewing any instances  
8 with Unit 2 personnel?

9 A Not that I can recall at this time.

10 Q Moving to numeral 2 under "Training" on that  
11 same page 16, "Write supervisor of operations memo which  
12 discusses pre-evolution briefings, the need for these  
13 briefings to review the most probable expected  
14 abnormalities, the need for these briefings to be  
15 conducted, whenever feasible in front of the controls."

16 Have you ever heard the expression  
17 "pre-evolution briefing"?

18 A I never heard the words "pre-evolution briefing."  
19 I do not know if it is referring to briefings that we  
20 give prior to doing some major evolution or not.

21 Q Was there a practice at Unit 2 at Three Mile  
22 Island before the accident to give briefings prior to  
23 major evolutions on the system?

24 A I do know there has been briefings prior to  
25 performing some kind of procedure before the evolution

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occurred.

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Q Who would give those briefings? Who gave those briefings that you recall?

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A The briefings could be given by the foreman, the supervisor or the STE at that time.

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Q Who was being briefed?

8

A The people who would be participating in the evolution.

9

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Q By that, you mean the people who would be manipulating the controls?

11

12

A And the AO's out in the plant who would be manipulating the valves.

13

14

Q So it would be the shift personnel below the shift foreman, is that correct?

15

16

A They would be involved.

17

Q Would there be anyone else included in this sort of briefing?

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19

MR. GLASSMAN: You are asking for the

20

witness' recollection, not his speculation.

21

Q Were there other people involved in the briefings that you recall?

22

23

A I don't recall if there were other people involved or not.

24

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Q Do you recall ever giving one of these

1  
2 briefings?

3 MR. GLASSMAN: You are asking the witness to  
4 recall a particular briefing?

5 MR. BENEDICT: I am asking whether it is  
6 your recollection that prior to -- any briefings,  
7 prior to the performance of a major evolution on  
8 Unit 2.

9 A I have given briefings prior to performing major  
10 evolutions to the people who would be participating in  
11 that evolution. I don't recall which briefings I gave.

12 Q In May of 1978, was Mr. Floyd Supervisor  
13 of Operations for the Three Mile Island facility?

14 A Jim Floyd was Supervisor of Operations for Unit 2.

15 Q Did you receive memos from Mr. Floyd in the  
16 course of your business prior to March 28, 1979?

17 MR. GLASSMAN: You asked whether he ever  
18 received a letter?

19 MR. BENEDICT: Yes.

20 A I don't recall.

21 Q Do you have any doubt in your mind that, in  
22 fact, you did receive in some time a memorandum from  
23 Mr. Floyd when he was supervisor of operations prior to  
24 the Three Mile Island accident?

25 A I have no doubt that I did receive memos from Mr.

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Floyd, but I don't recall what the memo said or when I received them.

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Q Is there a memo or document generically classified as a supervisor of operations memo or memorandum at the unit 2 facility or at the island?

A The best I can recall, there is a book kept, or was kept in unit 2 designated as supervisor of operations memo.

Q Do you recall what, if any requirements, there were for the review of the contents of that book by the licensed personnel?

A I do not know of any written requirements to review that book.

Q Was it your job responsibility to insure that the book included the most recent memoranda from the supervisor of operations?

A Not to my knowledge. It wasn't my responsibility.

Q Do you know whether anyone had such a responsibility?

A I would not know whose responsibility that was.

Q Focusing the question more broadly, do you know whether anybody had such a responsibility, whoever it might have been?

A No, I do not know.

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Q Did you receive at any time prior to the accident at Three Mile Island a memorandum, supervisor of operations memo from Mr. Floyd which indicated in words or substance that at pre-evolutions briefings there was a need for these briefings to review the most probable expected abnormalities, the need for these briefings to be conducted whenever feasible in front of the controls?

A I don't recall receiving a memo or any memos from Mr. Floyd at this time.

Q Do you recall receiving a memo from whomever it may have been from which indicated a need in briefings prior to major evolutions to review the most probable expected abnormalities and the need for these briefings to be conducted in front of the controls?

A I don't recall receiving a memo with that statement in it.

Q Not limiting it to the words that I spoke but rather to the substance of what I spoke, do you remember any memo that included the substance?

A I don't recall receiving any memo.

Q On this subject?

A On that subject.

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Q Reading from page 17 at the top, continuing under the subject heading "Training," numeral 3, "Develop standard format for how a trip/major transient gets reviewed in both units 1 and 2 with each operating shift. Floyd/Ross - May 10."

Do you know of any employee at Metropolitan Edison whose name is Ross, other than Mike Ross?

A At this time?

Q In the spring of 1978, anyone who had the last name of Ross other than Mike.

A Mike is the only one I recall having the last name of Ross.

Q During the period or at any time during the period that you served as a shift supervisor, was there a standard format for how a trip or major transient was to be reviewed with each operating shift?

A Not that I recall.

Q You don't recall receiving any memorandum or any training or advice with respect to the format that should be used in reviewing trips or transients with operating personnel?

A None that I can recall.

Q Do you recall receiving any such advice

Mehler

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2 or information prior to the time you became a  
3 shift foreman?

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A Not that I recall.

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Q Moving to numeral 5 on the same page,  
it reads, "Simulator training is a definite asset  
in helping the operator recognize and respond to  
this type of incident. a) Reevaluate sending the  
single unit licensed operators to the simulator  
each year vice every other year. Zechman/Tsaggaris -  
long term."

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Tuesday we discussed how often your  
understanding was that shift personnel or licensed  
individuals went to B & W simulator training. Does  
this refresh your recollection that at least some  
licensed individuals went to the simulator at B & W  
only every other year?

18

19

A I don't know of any licensed individuals that  
only went every other year.

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Q Moving to sub B of numeral 5, it reads,  
"Consider purchase of a small Omnidata \$300K  
simulator for in-house operator training. Send  
someone to Omnidata to evaluate its performance and  
capability. Zechman/Tsaggaris - long term."

25

Prior to the accident at Three Mile

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Island, was there a simulator for either of the units

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on Three Mile Island on site?

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MR. GLASSMAN: I think I am going to

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repeat what has become a standing objection to

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asking a question and appearing on the record

7

to relate it to something which Mr. Mehler

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said he does not recollect. If you would

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like to ask him some questions and then show

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him something from a document and see if

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that changes his recollection or refreshes it,

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you are entitled to do so, but it is objectionable

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to have a question appear on the record with

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some prior statement unrelated to it that the

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witness does not recall seeing.

16

MR. BENEDICT: I disagree that it is

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an objectionable practice, and I have a

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pending question, and I would like Mr. Mehler

19

to answer it.

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MR. GLASSMAN: I should emphasize the

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point by moving to strike the entire reference

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to this document that Mr. Mehler says he does

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not recall when those references are part of a

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different question which does not seek the

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witness's knowledge about the quoted paragraph.

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MR. BENEDICT: Your objection for whatever it is worth and if it is comprehensible is on the record, so let's proceed.

(Read back)

A To my knowledge, there was no simulator on Three Mile Island for either unit. We always utilized the B & W simulator.

Q Is the only simulator that you know of capable of simulating aspects of the Three Mile Island NSS systems the simulator in Lynchburg at Babcock & Wilcox?

A That is the only one that I am aware of.

(continued on next page)

1  
2 Q On Tuesday, you testified that you had  
3 heard some discussion about the acquisition of a  
4 simulator by Metropolitan Edison. Does my reading  
5 of 5 sub b refresh your recollection with respect to  
6 that?

7 MR. GLASSMAN: Objection. I don't know  
8 that the witness testified about hearing of  
9 that acquisition of the simulator.

10 There may have been some testimony  
11 relating to a simulator, but I don't know that  
12 the witness used those words or discussed that  
13 precise subject matter.

14 Q Did there ever come a time in the course  
15 of your employment at Metropolitan Edison that you  
16 heard of consideration of the acquisition of a  
17 simulator for the units, or one or more of the units  
18 that were on site at Three Mile Island?

19 A There were numerous times that I heard that  
20 Met Ed would like to procure their own simulator.  
21 It was only verbally among the people. I had no  
22 concrete evidence that they ever pursued getting  
23 their own simulator.

24 Q By "among the people" as you used it in  
25 that answer, do you include licensed individuals at

Mehler

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2 the plant?

3 A Training instructors, licensed people, the  
4 people I worked with daily.5 Q Does reading this portion of the Exhibit  
6 246 on Page 17 refresh your recollection as to any  
7 additional information you did hear about the  
8 acquisition or possible acquisition of a simulator  
9 by Met Ed?10 A I was not even aware of this statement, so --  
11 and it does not refresh my recollection at all.12 Q You never -- you do not recall hearing  
13 anything about a company named Omni-Data?

14 A I wouldn't even know what that company is.

15 MR. BENEDICT: We will break for lunch.

16 (Luncheon recess: 1:00 p.m.)

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## A F T E R N O O N            S E S S I O N

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2:10 p.m.

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B R I A N        A .        M E H L E R ,        having been  
previously sworn, resumed and testified further  
as follows:

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EXAMINATION (Continued)

9

BY MR. BENEDICT:

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Q        Returning to B&W Exhibit 246 and to the  
page from which I last read, Page 17, looking under  
the subheading "Other" and reading from numeral 1:  
"Precalculate the exact volumes of critical piping  
runs and tanks from various taps and capture in a  
procedure. Such a procedure would have helped in  
quickly analyzing the pressurizer situation and in  
determining the core remained covered. Mackey -  
May 12."

19

20

Do you know an individual named Mackey  
who was employed by Met Ed in the spring of 1978?

21

A        I believe they are referring to Terry Mackey.

22

Q        Is he still with Met Ed?

23

A        No, he is not.

24

Q        Do you know where he is now?

25

A        No, I do not.

Mehler

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Q What was his position at Met Ed, the last position you recall him holding?

3

4

A I believe he worked, and I don't know his title, but at QC.

5

6

Q That is quality control?

7

A Yes.

8

9

10

Q Is there a procedure for Unit 2 which contains the exact volumes of critical piping runs and tanks from various taps?

11

A Not to my knowledge.

12

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14

15

Q Do you recall any changes in any procedures on Unit 2 which -- the change of which incorporated within that procedure exact volumes of critical piping runs and tanks from various taps?

16

A Not to my knowledge.

17

Q Reading from number 2: --

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MR. GLASSMAN: I would like to suggest that we could speed the examination along if you would not endlessly read into the record portions of a document that Mr. Mehler does not even recall having seen and which does not pertain directly to his examination.

If you want to read something, we can all read the document and see if it refreshes

1  
2 his recollection on something, but it is doing  
3 nothing more than creating a cluttered,  
4 irrelevant examination.

5 Q Reading from Page 17 of Exhibit 246 after  
6 the numeral 2: "Escalate the alarm window correction  
7 program in priority. This will eliminate an excessive  
8 number of lighted panel alarms at the baseline  
9 condition and give the operator a better chance to  
10 focus on what to respond to. Shovlin - ongoing."

11 Do you know an individual at Met Ed who  
12 was employed by Met Ed in the spring of 1978 named  
13 Shovlin?

14 A I believe they are referring to Dan Shovlin.

15 Q Is Mr. Shovlin still with Metropolitan  
16 Edison?

17 A Yes, he is.

18 Q Do you know what his position is today?

19 A I don't know his correct title. I believe it  
20 could be manager of maintenance.

21 Q Is he on site at Three Mile Island?

22 A Yes, he is.

23 Q During the period that you served as a  
24 shift supervisor from April 1, 1978 through to the  
25 accident, March 28, 1979, what was the approximate

1  
2 number of lighted panel alarms at baseline conditions  
3 in the Unit 2 control room?

4 A I have no idea of the number.

5 Q Did you ever receive, prior to the  
6 accident, comments or complaints or observations from  
7 any licensed people at Unit 2 with respect to the  
8 number of lighted panel alarms at baseline conditions?

9 A I don't know what you are referring to as  
10 baseline conditions.

11 Q The expression baseline conditions is not  
12 one that you use in the course of your business?

13 A No, it is not.

14 Q Do you remember ever hearing any comments  
15 or complaints from any licensed individual with  
16 respect to the number of lighted panel alarms during  
17 normal operating conditions for the TMI-2 reactor?

18 A Not that I recall. I don't recall any comments.

19 Q In light of the fact that you don't have  
20 a general understanding of what baseline conditions  
21 means, I will go back to the prior question.

22 Can you give me an approximate number of  
23 the lighted panel alarms at the Unit 2 Three Mile  
24 Island facility during normal operating conditions?

25 A No, I cannot.

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Mehler

2 Q Did you ever receive any complaints or  
3 observations or comments from any licensed individual  
4 with respect to the inability to focus because of the  
5 number of lighted panel alarms in the Unit 2 control  
6 room?

7 A Not that I recall.

8 Q Did you ever complain to anyone or comment  
9 or remark upon the number of lighted panel alarms in  
10 the Unit2 control room?

11 A Not that I recall.

12 Q Reading after numeral 3 under "Other",  
13 "Add additional alarm acknowledgement capability in the  
14 control room. Currently the operator at the controls  
15 has to go across the control to read an alarm and then  
16 back to the center console to acknowledge it. GPUSC -  
17 Toole - determine GPU position."

18 Does what I just read to you refresh  
19 your recollection about the number of alarm response  
20 mechanisms there were in the Unit 2 control room at  
21 the time you came on as a shift supervisor in April?

22 A No, it doesn't.

23 Q Prior to March 28, 1979, were you aware  
24 of any incident which involved a failed open PORV on  
25 any pressurized water reactor?

1

A Not that I recall.

2

3

Q Were you aware of any event involving a failed open PORV on any boiling water reactor?

4

5

A Not that I recall.

6

Q Were you aware of any incident involving a failed open PORV on any fossil plant?

7

8

A No, not that I recall.

9

Q You served for a time at a fossil electric generating facility, isn't that right?

10

11

A Yes.

12

Q What facility was that?

13

A Crawford Generating Station.

14

Q Is Crawford Generating Station still in active service?

15

16

A No, it is not.

17

Q When you worked at Crawford, was it generating electricity?

18

19

A Yes, it was.

20

Q Did the Crawford facility have pilot operated relief valves on it?

21

22

A I don't know.

23

Q What was your job position during the time you worked on it?

24

25

A I started at Crawford Station as a utility A

2 worker, and when I left Crawford Generating Station,  
3 I was a second class fireman relief.

4 Q Were you required in order to hold any  
5 of the positions you did hold on Crawford Station to  
6 be familiar with the pressure relief system on the  
7 boiler unit?

8 A I don't recall any requirements for me to be  
9 familiar with the pressure relief system on the  
10 boilers.

11 Q Did you know that the Crawford Station  
12 facility had code relief valves?

13 A I knew they had high pressure relief valves.

14 Q Safety valves?

15 A Yes.

16 Q But you do not recall whether they had  
17 any pilot-operated relief valves?

18 MR. GLASSMAN: Asked and answered.

19 A I don't recall if they had any pilot-operated  
20 relief valves.

21 Q Prior to the accident at Three Mile  
22 Island on March 28, had you ever heard of an  
23 incident occurring at Davis-Besse where a PORV opened  
24 and failed to close?

25 A Prior to March 28?

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Q Yes.

2

A No, I did not.

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Q Did you ever hear of an incident occurring at Davis-Besse prior to March 28 where the pressurizer level went up while pressure simultaneously decreased?

5

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MR. GLASSMAN: The question may be

7

somewhat unclear in the place of time.

8

9

Q Did you know of such an incident prior to the accident at Three Mile Island?

10

11

A No, I did not.

12

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Q Did you know prior to the accident at Three Mile Island of an incident occurring at Davis-Besse in which the operators overrode HPI and then reinitiated it?

16

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A No, I did not.

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Q Prior to the accident in March of 1979, had you heard of any incident on a pressurized water reactor where pressurizer level went up while at the same time pressure went down, regardless of the reasons for those indications?

A Not that I recall.

Q Again prior to the accident in March of 1979, had you ever heard of an incident in which operators at a pressurized water reactor facility

1  
2 terminated high pressure injection while a loss of  
3 coolant accident was in progress?

4 A Not that I recall.

5 (Letter to John G. Kemeny and attached  
6 documents marked B&W Exhibit 247 for  
7 identification, as of this date.)

8 Q I would like to show you a document that  
9 has been marked B&W 247 for identification and ask  
10 you whether you have ever seen a copy of this document.

11 A Not that I recall.

12 Q This document purports to be a letter to  
13 John G. Kemeny, Chairman of the President's Commission  
14 on the Accident at Three Mile Island, from R. C. Arnold  
15 of Metropolitan Edison Company. The letter is dated  
16 August 30, 1979, and it has a number of attachments  
17 thereto.

18 I would like to direct your attention  
19 to what Mr. Arnold in his letter refers to as  
20 enclosure number 7.

21 Enclosure number 7 and enclosure number 8  
22 are identified by Mr. Arnold on Page 3 of his letter  
23 as the Licensee Event Report NP-32-77-16 and a  
24 supplement thereto submitted to the NRC by the  
25 Davis-Besse licensee, Toledo Edison, following the

1  
2 incident that occurred at Davis-Besse on September 24,  
3 1977.

4 Enclosure number 7 appears to be a letter  
5 dated October 7, 1977 from a Mr. Jack Evans, Station  
6 Superintendent, at the Davis-Besse Nuclear Power  
7 Station to Mr. James G. Keppler, Regional Director,  
8 Region 3, Office of Inspection and Enforcement, U.S.  
9 Nuclear Regulatory Commission.

10 Have you ever seen what has been attached  
11 to Mr. Arnold's letter as enclosure 7 before?

12 A I don't recall seeing this document at all.

13 Q Have you ever seen a Licensee Event Report  
14 for a facility other than a Three Mile Island  
15 facility?

16 A Not that I recall.

17 Q Have you ever seen a Licensee Event  
18 Report for an incident occurring at a Three Mile  
19 Island facility?

20 MR. GLASSMAN: You are asking from any  
21 time up to today?

22 MR. BENEDICT: Yes.

23 A I am quite sure I have seen some that pertain  
24 to Three Mile Island, both with Unit 1 and Unit 2.  
25 I don't remember which particular ones I did see.

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Q Can you recall whether you have seen any Licensee Event Reports pertaining to either Unit 1 or Unit 2 prior to the accident at Three Mile Island?

A I don't recall the exact time when I have seen any of the Licensee Event Reports.

Q Is it part of your job responsibilities as shift supervisor to review Licensee Event Reports relating to incidents at either Unit 1 or Unit 2 of the Three Mile Island facility?

MR. GLASSMAN: Is the question directed to Mr. Mehler's current responsibilities?

MR. BENEDICT: Any time he served as a shift supervisor.

A It is not one of my responsibilities to review Licensee Event Reports prior to being sent into the NRC.

Q Do you recall whether you have ever reviewed a Licensee Event Report prior to its submission to the NRC?

A I don't recall ever doing that.

Q Turning to enclosure 8. Enclosure 8 is a letter dated November 14, 1977. Enclosure 8 of B&W 247 purports to be a letter from Terry D. Murray, Station Superintendent, Davis-Besse Nuclear Power

1  
2 Station to Mr. James G. Keppler, Regional Director,  
3 Region 3, Office of Inspection and Enforcement,  
4 U.S. Nuclear Regulatory Commission.

5 This enclosure is identified by Mr.  
6 Arnold on Page 3 as being the supplement to the  
7 enclosure number 7 Licensee Event Report NP-32-77-16.

8 Have you ever seen this supplement to  
9 the previous LER before?

10 A No, I have not.

11 Q Up to this day you can't recall ever  
12 having seen it?

13 A I don't recall seeing any of this documentation  
14 here.

15 Q And with respect to the questions and  
16 answers on whether you had ever seen an LER for any  
17 facility other than Unit 1 or Unit 2 at TMI, you have  
18 never seen a supplement to any LER for any facility  
19 other than Unit 1 or Unit 2, is that correct?

20 A Not that I recall.

21 Q Moving to enclosure number 9, enclosure  
22 9 is identified on Page 3 of Mr. Arnold's letter as  
23 being one of the NRC's monthly LER PWR listings,  
24 in this case dated December 8, 1977.

25 Mr. Arnold goes on to say, "Where

1  
2 information on the Davis-Besse September 24, 1977  
3 event appears in a nine-line summary on Page 39."

4 I am reading from the covering letter on  
5 Page 3.

6 MR. GLASSMAN: One of the letters which  
7 Mr. Mehler said he did not recall ever seeing?

8 MR. BENEDICT: That's right. I am just  
9 identifying the enclosure the way Mr. Arnold  
10 has identified it, which is the only source I  
11 have.

12 Q Do you have in front of you enclosure 9  
13 which has the date December 8, 1977 on it? It  
14 appears on United States Nuclear Regulatory Commission  
15 letterhead, signed by Mr. Kirk, Acting Director,  
16 Regulatory Info Systems Division, Office of Management  
17 Information and Program Control.

18 MR. GLASSMAN: My copy, the document  
19 has an illegible date at the top.

20 MR. BENEDICT: Otherwise what I set forth  
21 is in fact what you have in front of you, isn't  
22 it? It is true the date is very difficult to  
23 read.

24 A It looks like that.

25 Q Have you ever seen this LER summary before?

A Not that I recall.

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Q Have you ever received any NRC monthly LER PWR listings?

3

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A I don't recall ever receiving this type of listing.

5

6

Q You know of no requirement at Metropolitan Edison that licensed people on the TMI facilities review monthly LER PWR listings issued by the NRC?

7

8

A I know of no requirement.

9

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Q Mr. Arnold states in his letter on page 3 in the last sentence of the third paragraph, "Training Department reviewed the report as to the need for possible guidance to the operating staff. No action was deemed necessary."

14

15

16

Does this assist your recollection in whether or not you have ever seen this document before?

A No, it does not.

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Q Enclosures 10 and 11 are identified by Mr. Arnold on page 3 of his letter as the November 1977 issue of the NRC's Gray Book (Enclosure 10) where a one-paragraph description appears on page 2-28. "A follow-up item appeared in the December 1977 volume of the Gray Book on page 2-28 (Enclosure No. 11)."

23

24

25

Looking at what Mr. Arnold identifies as enclosures 10 and 11, have you ever seen these volumes and editions of NUREG 0020?

1

2

MR. GLASSMAN: I don't know if the witness can figure out what you are talking about.

3

4

I have trouble doing that. If you point out to

5

us particular pages and you want to find out if

6

the witness has seen these before, please do so,

7

but reading a whole introductory portion doesn't

8

help us.

9

MR. BENEDICT: The reason I am doing this

10

is because this document which was apparently

11

prepared by Mr. Arnold of the Met Ed Company

12

did not include markings showing which the

13

enclosures were. I have to work on descriptions

14

that Mr. Arnold provided in his letter.

15

MR. GLASSMAN: I am only suggesting if you

16

have any more enclosures to some documents of

17

this sort that you would like the witness to look

18

at, perhaps you can just pull out those pages

19

and find out whether the witness ever saw them.

20

MR. BENEDICT: Enclosure 10 is headed

21

"Operating Units Status Report Data, as of

22

10-31-77." In the upper right-hand corner

23

appears the words "NUREG 0020, Volume 1, No. 3."

24

MR. GLASSMAN: I now have it.

25

MR. BENEDICT: Enclosure 11 appears with

1  
2 the same cover page with the exception of the  
3 dates and volume number or issue number being  
4 different.

5 In the case of enclosure 11, the data is  
6 as of 11-30-77 and the month December appears in  
7 the upper right-hand corner.

8 BY MR. BENEDICT:

9 Q Have you ever received or have you ever  
10 seen copies of these volumes or editions of NUREG 0020?

11 A I don't recall seeing anything that came out of  
12 NUREG 0020.

13 Q Are you familiar with the expression "the  
14 Gray Book"?

15 A I have never heard the expression "Grey Book"  
16 mentioned before.

17 Q You do not know that the Gray Book is another  
18 descriptive term for the NRC's NUREG 0020?

19 A No, I do not.

20 Q Have you ever reviewed any documents which  
21 purported to be NUREG 0020 or any portion of such a  
22 NUREG document?

23 MR. GLASSMAN: I think that has been asked  
24 and answered.

25 A Since I don't know what NUREG 0020 is, I would

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never know if I reviewed any documents out of it.

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Q Do you recall ever reviewing a document that had a cover page that had the title and appeared in the arrangements that these enclosures 10 and 11 do, which contain summaries or descriptions of events at operating facilities?

A I don't recall ever reviewing documents with that format.

Q Returning to Mr. Arnold's letter on page 3 and the last sentence in the fourth paragraph, reading "These documents were available in the Met Ed generation library in Reading and in the Training Department at TMI, but the Davis-Besse incident was not identified as requiring action."

Does that refresh your recollection that you have reviewed Gray Book or NUREG 0020 volumes in the Training Department at TMI?

A No, it does not.

Q Is it your recollection that you have not reviewed such documents in the Training Department at TMI?

A No, it is not.

Q It is not your recollection that you have not?

1

2

A I couldn't say for a fact that I haven't or that I have.

3

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Q You just don't know at this point?

5

A Very truthfully, I don't know.

6

7

Q What documents have you reviewed in the Training Department at TMI?

8

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MR. GLASSMAN: Are we asking for any document that the witness ever recalls having reviewed while he was present in the Training Department? Is that correct?

12

13

MR. BENEDICT: I am, but I will try to narrow it.

14

15

Q Is there material provided for reference by licensed personnel in the Training Department at TMI?

16

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MR. GLASSMAN: Is the question related to whether something specifically is designated for reading by licensed personnel as opposed to others or just as reading material in the Training Department?

21

22

MR. BENEDICT: Do you want to object to the form of the question?

23

MR. GLASSMAN: Yes.

24

25

MR. BENEDICT: State your objection and let the witness answer. Stop obfuscating the record.

1  
2 I can't believe how uninterested you are in  
3 seeing how this deposition progresses and seeing  
4 whether or not Mr. Mehler gets to come back to  
5 New York for several more days of this.

6 Allow the deposition to proceed and maybe  
7 we will finish.

8 MR. GLASSMAN: We have now spent three  
9 days going over for the most part irrelevant  
10 material or questioning of documents that the  
11 witness doesn't recall seeing and requestioning of  
12 the same documents, and now we are going into  
13 anything that might be reading material somewhere  
14 in the Training Department.

15 I will let him answer, but I really hope  
16 you focus your questions more.

17 MR. BENEDICT: If you had involved yourself  
18 more in this litigation particularly to the extent  
19 of being involved to see the sort of depositions  
20 your firm is taking for the benefit of your  
21 client, you would not be able to say what you have  
22 been saying.

23 Let's read the pending question and see if  
24 we can get an answer that we can work from.

25 (Record read by the reporter.)

1

2 A There is a multitude of material in the Training  
3 Department that can be utilized by licensed personnel  
4 and non-licensed personnel.

5 Q Is there any material, to your knowledge,  
6 that is in the Training Department which contains  
7 information pertaining to events at operating facilities  
8 in the Training Department?

9 A I cannot say for a fact that it is kept only in  
10 the Training Department, but we do get a clearinghouse  
11 document.

12 Q Do you know whether that clearinghouse  
13 document is kept in some fashion in the Training  
14 Department as well as perhaps other places so that it  
15 can be available to Met Ed personnel?

16 A I don't know if it is kept in the training  
17 facility, where it is kept. I do know that periodically  
18 I have seen clearinghouse documents in the training  
19 facility. I have reviewed them in the training facility.  
20 I have reviewed them on shift up in the office.

21 Q Other than the clearinghouse document you  
22 spoke of, can you recall any other documents that are  
23 available in the Training Department or elsewhere at  
24 Met Ed which contain information about occurrences at  
25 operating facilities?

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A The only one that really comes to mind right now  
is the clearinghouse document.

(Continued on next page.)

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Q Is there a collection of these clearing house documents kept in the control room or nearby of Unit 2?

3

4

A Not to my knowledge.

5

6

Q You indicated earlier that you had reviewed some of these clearing house documents, I believe you said in your office, is that correct?

7

8

A Yes.

9

10

Q Where did you obtain the documents, if you recall that you reviewed?

11

12

A They will usually wind up on my desk with a routing slip on it.

13

14

Q Do you know where the document originated within Met Ed? Do you know who prepared the routing list and sent it out?

15

16

A No, I do not.

17

18

Q Do you recall who else is on the routing list of the clearing house material you are discussing?

19

20

A I would not even want to venture a guess who all is on that routing slip.

21

22

Q Are the five other shift supervisors who were shift supervisors on the day of the accident at Three Mile Island included on that list?

23

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MR. GLASSMAN: If you know.

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A I could not say for a fact that they were on that clearing house routing slip. To the best of my recollection, all supervisors were on it.

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Q Do you know whether all shift foremen who were shift foremen at the time of the accident at Three Mile Island were on that routing list?

6

7

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A I don't recall if they were or weren't.

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Q Did you receive this document at your request or was it sent to you without your having to request it?

12

13

MR. GLASSMAN: We are talking about this document?

14

15

Q The clearing house documents that you recall receiving and reviewing in your office.

16

MR. GLASSMAN: Whichever those might be.

17

MR. BENEDICT: Right.

18

A I don't recall ever requesting it.

19

20

Q Do you know whether you received each of the clearing house documents that were received on site at Med Ed?

21

22

A No, I do not know.

23

24

Q Do you recall with what frequency you received these documents?

25

MR. GLASSMAN: What period of time?

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MR. BENEDICT: Let's say during the year that you served as a shift supervisor immediately prior to the Three Mile Island accident.

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A No, I do not recall the frequency I received them.

6

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Q Do you recall whether you received them approximately on a monthly basis?

8

A No, I do not even recall that.

9

10

Q Can you tell me how many you reviewed in the year that you were shift supervisor?

11

A I don't have the slightest idea how many I possibly reviewed.

12

13

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Q You can't tell me whether it was more or less than ten?

15

A I wouldn't want to venture a guess on that.

16

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Q Do you recall whether you received these clearing house memoranda in the year immediately preceding your time as a shift supervisor? In other words, from April of 1977 through April of 1978.

20

A I don't recall.

21

22

Q You don't recall whether you received them as of when you served as a shift foreman?

23

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A I don't recall at what period of time I started to receive the clearing house documents, whether it was back since day one or if it was something that just started

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within the last two years.

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Q You do, however, recall that you received at least one of these with a routing slip attached prior to the Three Mile Island accident?

6

A I cannot even say that with any certainty.

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Q Looking at the documents that have been indicated as enclosures 10 and 11 does not refresh your recollection that such documents were available in the Training Department?

11

A No, it does not.

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Q Turning to what Mr. Arnold calls enclosure 12, which Mr. Arnold identifies as "a publication titled 'Current Events - Power Reactors' from the NRC," at page 3 of his letter, and enclosure 12 appears to be a document headed "Current Events - Power Reactor, United States Nuclear Regulatory Commission dated 1 September - 31 October 1977 (Published December 1977)," do you recognize this document?

20

A This particular document.

21

22

23

Q In this case, I am speaking of the 1 September - 31 October 1977 version of "Current Events - Power Reactor."

24

A No, I do not.

25

Q Have you ever seen any editions of "Current

Mehler

1

2 Events - Power Reactors"?

3 A Yes, I have.

4 Q Have you seen more than one?

5 A Yes, I have seen more than one, to the best of  
6 my recollection.7 Q Did you see any prior to the accident at  
8 Three Mile Island?9 A I do not recall if I have seen any prior to the  
10 accident at Three Mile Island.11 Q Do you recall that you did not see any  
12 prior to the accident at Three Mile Island?13 A No, I don't recall that I did not see any prior  
14 to the accident.15 Q How did the copies of "Current Events -  
16 Power Reactors" that you have seen come to your  
17 attention?18 A I don't recall how they came to my attention,  
19 whether it was through a routing slip or in training.20 Q Do you know whether you ever received any  
21 copy of "Current Events - Power Reactors" with a routing  
22 slip attached?23 A No, I do not know if that is the way they came  
24 to my knowledge.

25 Q Of the editions which you can remember

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receiving, were they brought to your attention because of specific information contained therein?

A I don't know.

Q Do you recall whether anyone has ever asked you to review the contents of any edition of "Current Events - Power Reactors"?

A I don't recall that ever being asked of me.

Q Did you ever direct anyone else's attention to a copy of "Current Events - Power Reactors" which you had received and reviewed?

A I don't recall if I did or didn't.

Q Can you recall the first time you ever saw an edition of "Current Events - Power Reactors"?

A No, I cannot.

Q Can you recall whether you saw your first edition prior to your becoming a shift supervisor?

A No, I can't.

Q Turning to what Mr. Arnold identifies as enclosure 13, and he describes as, on page 4 of his letter, "a commercially circulated publication known as The Atomic Energy Clearing House in its January 9, 1978 edition on pages 17-18 (enclosure 13)." Do you have what I have described in front of you?

A Yes.

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2

Q It reads at the top, "Atomic Energy Clearing House," and shows the date January 9, 1978, Volume 24, No. 2. Is that what you have?

3

4

5

A Yes, it is.

6

Q Have you ever seen this document?

7

MR. GLASSMAN: Is this the document that in the second entry says, "President Carter and the Shah of Iran agreed on nuclear safeguards"?

8

9

10

MR. BENEDICT: Yes, it is.

11

Q Have you ever seen a copy of this document before, this particular edition?

12

13

A I don't recall seeing this particular document before.

14

15

Q Not limiting it, of course, to this particular document with, for example, the Metropolitan Edison stamp in the upper right-hand corner, referring generally to this edition, a copy of this edition of the Atomic Energy Clearing House.

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A Are you asking me have I seen this one or copies coming from the clearing house?

21

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Q What I am interested in is somewhat in between that. I am interested in whether you have seen -- putting aside whether it was actually the document we have before us with its scratches and

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occasional indications on it, have you ever seen a copy  
3 of the Atomic Energy Clearing House dated January 9,  
4 1978, Volume 24, No. 2?

4

5

A Not that I recall.

6

Q Looking at this document does not refresh  
7 your recollection as to whether you have ever seen  
8 that document?

8

9

A Not at all.

10

Q Is this document, this Atomic Energy  
11 Clearing House document, an edition of the clearing house  
12 documents you were discussing earlier in the testimony?

12

13

A This looks like the particular document that I am  
14 referring to. Not this particular document, but  
15 documents that come from the clearing house, yes.

15

16

Q Is this what you remember the documents  
17 you received having written at the top of them, Atomic  
18 Energy Clearing House?

18

19

A I don't recall if that is what was written across  
20 the top or not but it was in basically this format,  
21 except it was on longer pages.

21

22

Q 13- or 14-inch paper?

23

A Yes.

24

25

Q You have referred to this document or you  
have referred to documents as clearing house documents,

1  
2 and in your reference, you have now identified this as  
3 being an example of the documents you were discussing  
4 earlier, is that correct?

5 A Yes.

6 Q Referring to Mr. Arnold's letter at page 4 --

7 MR. GLASSMAN: I think we are talking about  
8 this document, this type of format, not necessarily  
9 the precise document in front of the witness?

10 MR. BENEDICT: I think the record is clear  
11 on that question.

12 Q Referring back to the carryover paragraph on  
13 page 4 of the letter by Mr. Arnold, reading from the  
14 sixth line down from the top of the page, "Though this  
15 document was circulated to Met Ed and TMI personnel,  
16 the Davis-Besse event was not identified as requiring  
17 action at TMI."

18 Does that refresh your recollection as to  
19 the individuals who were included in the routing list  
20 of the copies of the clearing house documents that you  
21 received?

22 A No, it doesn't.

23 Q You continue to not recall other than saying  
24 it is your understanding that the shift supervisors were  
25 included on that list, you don't have any other

1

2 recollection of who was included on the list?

3 A I would have to see each individual routing slip  
4 to make that statement.

5 Q Does this help refresh your recollection  
6 as to the regularity with which you received clearing  
7 house documents?

8 A No, it does not.

9 Q Referring your attention to what Mr. Arnold  
10 identifies as enclosures 14 and 15 which he identifies  
11 from page 4, second paragraph, "a commercially published  
12 newsletter from Nuclear Power Experience, Inc.," do  
13 you recognize -- turning to enclosure 14 which has  
14 written in hand at the top "Nuclear Power Experience" --

15 MR. GLASSMAN: Just so it is clear, I assume  
16 counsel is for convenience referring to what  
17 Mr. Arnold supposedly identified. He is not here,  
18 and we are talking of a letter which you are  
19 reading from.

20 MR. BENEDICT: I am trying to identify what  
21 Mr. Arnold means when he speaks of documents, and  
22 I have to refer to his descriptions because they  
23 are the only descriptions I have.

24 MR. GLASSMAN: I suspect if you want to try  
25 to figure out what Mr. Arnold means, it doesn't

1  
2 help to ask Mr. Mehler.

3 MR. BENEDICT: I have not asked Mr. Mehler  
4 one question with respect to what Mr. Arnold meant.

5 MR. GLASSMAN: I am just trying to clarify  
6 the state of the record.

7 MR. BENEDICT: You are trying to fuzz up the  
8 record and waste time as you have been for the  
9 last three days.

10 Q Turning to what Mr. Arnold has identified  
11 as enclosure 15 with a figure at the top left which  
12 appears to be the outline of what might be a nuclear  
13 facility with the words "Nuclear Power Experience, Inc."  
14 appearing within the figure, followed by the address  
15 P.O. Box 544, Encino, California 91316 and then a phone  
16 number.

17 Do you have those two enclosures in front  
18 of you?

19 A Yes.

20 Q Have you ever seen the documents or copies  
21 of the documents before you now which are noted as  
22 enclosures 14 and 15?

23 A I don't recall seeing these documents.

24 Q Do you recall ever receiving a document  
25 which was created by an organization

1  
2 called Nuclear Power Experience, Inc.?

3 A I don't recall receiving any documents from  
4 Nuclear Power Experience.

5 Q Do you recall ever reviewing any documents  
6 whether or not you received a copy of them?

7 A No, I do not recall reviewing any documents  
8 from them.

9 Q Returning to page 4 of Mr. Arnold's letter,  
10 Mr. Arnold states, "With respect to the NSSS vendor,  
11 Met Ed representatives at the B&W owners group meetings  
12 have no record of the September 1977 event being  
13 mentioned at those meetings. At one B&W users group  
14 meeting, there was a cursory mention of the event.  
15 The enclosed minutes of such meeting (enclosure 16)  
16 confirm it was given only limited attention (See page  
17 11)."

18 Referring to the document, the first page  
19 of which is a letter from W. A. Cobb of Babcock & Wilcox  
20 Company to B&W Users Group Distribution, could you review  
21 this document which appears to end at the page marked  
22 at the top "Operating Plant Service Bulletin," and tell  
23 me whether you have ever seen this document before?

24 MR. GLASSMAN: Is the Operating Plant  
25 Service Bulletin a portion of a different document?

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MR. BENEDICT: Yes, according to Mr. Arnold's letter.

MR. GLASSMAN: You would like the witness to review the pages prior to that?

MR. BENEDICT: No, starting with the letter dated February 3, 1978 and through but not including the page marked Operating Plant Service Bulletin. I don't recall this particular document at all.

Q Do you recall any portion of this document, having seen it prior to today?

A I don't recall seeing any portion of this document prior to today.

Q Have you ever heard of the B&W owners group?

A I don't know if I have heard of it in those terms.

Q Differentiating now between the document which is marked as enclosure 16 which is in fact with reference to the B&W users group and focusing instead on the question of whether or not you are familiar with an organization or outfit called B&W owners group, have you ever heard of a group called the B&W owners group?

A Those particular words, I don't recall them ever being used.

Q Have you ever heard of an organization

1  
2 called the B&W users group?

3 A I don't recall those particular words being used.  
4 I do know that periodically plants that are bought  
5 from B&W, that people from those plants go down to B&W,  
6 to Lynchburg, for meetings. I don't know what word they  
7 use to describe that particular group.

8 Q Do you know how frequently these meetings  
9 are held?

10 A No, I do not.

11 Q Do you know anyone at Met Ed who attends  
12 these meetings, whom you know attended these meetings?

13 A Prior?

14 Q Prior to the Three Mile Island accident. I  
15 will restate the question. It may be a little unclear  
16 on the record.

17 As you sit here today, do you know anyone  
18 who attended meetings that you have discussed, the  
19 periodic meetings where owners of B&W plants met prior  
20 to the Three Mile Island accident?

21 A I don't recall if I knew individuals that went to  
22 that meeting prior to 1979.

23 Q After the accident in 1979?

24 A Before the accident.

25 Q You can't identify for me, is that right?

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A Right.

Q Turning to what has been identified as enclosure 16, to enclosure 1 of enclosure 16, which is a list of attendees, it reads, "Enclosure 1, Attendees, B&W Users Group Meeting, November 15, 1977." Looking about halfway down the list I described, the names G. P. Miller and J. P. O'Hanlon appear. After each of their names is listed under the "Company" column, "Metropolian Edison - TMI." After Mr. O'Hanlon's name is listed "Metropolitan Edison - TMI-1."

Did you know Mr. Miller and Mr. O'Hanlon prior to the accident at Three Mile Island?

A Yes, I did.

(Continued on the following page.)

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Q Can you tell me the titles that Mr. Miller and Mr. O'Hanlon held on the date of the accident?

3

4

A I am not sure of the correct title of Mr. O'Hanlon on the day of the accident.

5

6

MR. GLASSMAN: Is the question directed to the day of the accident?

7

8

MR. BENEDICT: Yes.

9

10

A If my memory is correct, Mr. O'Hanlon was no longer working for Met Ed on the day of the accident.

11

Q What about Mr. Miller?

12

13

A I don't know his actual title but he was I think Superintendent of Three Mile Island.

14

15

Q Do you know whether that was the position Mr. Miller held on November 15 of 1977?

16

A I don't know if that is the title he held in 1977.

17

Q Is Mr. O'Hanlon still with a GPU company?

18

19

A No, he is not. If I am correct, he works for Arkansas.

20

21

Q Do you recall that Mr. O'Hanlon left all of the GPU companies prior to the accident at Three Mile Island?

22

23

A Can I hear the question?

24

Q I will clarify the question.

25

Had Mr. O'Hanlon left the employ of any

2 GPU company, Met Ed or any of GPU's other  
3 subsidiaries, by the date of the accident on March 28th,  
4 1979?

5 A I am not sure what date Mr. O'Hanlon left Met Ed's  
6 employment, but when he did leave it, he went, to the  
7 best of my knowledge, to work for Arkansas.

8 Q What was Mr. O'Hanlon's last position you  
9 recall at Metropolitan Edison?

10 A Superintendent TMI Unit 1.

11 Q Who held that position, if you recall, on  
12 the day of the accident on March 28th?

13 A I believe Jim Seelinger.

14 Q Were you aware prior to the accident on  
15 March 28th, 1979 that Mr. Miller and Mr. O'Hanlon  
16 had attended at least one B&W Users Group meeting?

17 A No, I was not aware.

18 Q Did you ever discuss with Mr. Miller and  
19 Mr. O'Hanlon any meetings that they had with  
20 representatives of some or all of the  
21 other B&W nuclear facilities?

22 A Not that I recall.

23 Q Do you recall either Mr. Miller or Mr.  
24 O'Hanlon ever mentioning to you that he had discussed  
25 B&W facilities with any representative of any B&W

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2 nuclear facility?

3 A Not that I recall.

4 Q Was that question confusing to you?

5 A The way I understood the question is do I recall  
6 Mr. Miller or Mr. O'Hanlon discussing with any other  
7 B&W users any other meetings with B&W.

8 Q Let's try again, in that case.

9 Taking Mr. Miller, do you recall any  
10 conversations with Mr. Miller prior to the accident at  
11 Three Mile Island in which he mentioned that he was in  
12 contact or had been in contact with representatives of  
13 the other operating utilities with B&W reactors?

14 A Not that I recall.

15 Q Do you recall any such conversation with  
16 Mr. O'Hanlon?

17 A Not that I recall.

18 Q Do you recall any such conversation with  
19 Mr. Miller after the Three Mile Island accident?

20 A Not that I recall.

21 Q Have you ever been asked to attend any  
22 meeting in which representatives from other operating  
23 utilities of B&W reactors would be present?

24 A No.

25 Q Have you ever attended a meeting or met with

1  
2 representatives of other utilities that owned B&W  
3 plants?

4 A Not that I recall.

5 Q Not before or since the accident?

6 A Not that I recall.

7 Q Moving forward in the document to the second  
8 page of enclosure 16, to the distribution list, looking  
9 at the second page, have you ever had any conversations  
10 with Mr. Herbein in which he told you that he  
11 received information with respect to meetings among  
12 representatives of the various utilities that owned  
13 B&W nuclear steam supply systems?

14 A Not that I recall.

15 Q Have you ever spoken with Mr. Herbein  
16 to this day on any subject?

17 A Yes, I have.

18 Q Had you spoken with Mr. Herbein prior  
19 to the Three Mile Island accident?

20 A Yes, I have.

21 Q Were these discussions related to your  
22 work as opposed to being social conversations?

23 A Yes.

24 Q They were related to work?

25 A Yes.

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Q Turning to the second page of the distribution list, one of the recipients is listed as Mr. L. L. Lawyer.

3

4

Do you know Mr. Lawyer?

5

A Yes, I do.

6

7

8

9

Q Did Mr. Lawyer at any time prior to the Three Mile Island accident tell you that he received information concerning meetings among utilities which owned B&W nuclear steam supply systems?

10

A Not that I recall.

11

12

13

Q Do you recall ever having such a conversation with Mr. Lawyer following the Three Mile Island accident?

14

A Not that I recall.

15

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19

Q On page 4 of Mr. Arnold's letter to Mr. Kemeny, he identifies enclosure 17 as being, "The September 30, nineteen-seven" -- and then the last number of the date is obliterated -- "issue of the B&W operating plant service bulletin."

20

21

22

23

Do you have before you a document headed "Operating Plant Service Bulletin, a Nuclear Service Publication, Babcock & Wilcox, Volume 2, No. 13, September 30, 1977"?

24

A Yes.

25

Q Have you ever seen a copy of this document,

1  
2 this particular document, that is to say, a document  
3 of this date?

4 A Not that I recall.

5 Q Have you ever seen a copy of any document  
6 identified as an operating plant service bulletin  
7 prepared by B&W?

8 A Yes, I have.

9 Q Have you received copies of such a document?

10 A Not to my knowledge.

11 Q When did you see such a document?

12 A I seen it on the bulletin board down at B&W  
13 in their training facility.

14 Q The document was posted on the bulletin  
15 board?

16 A Yes, it was.

17 Q Did you see more than one edition over  
18 the time that you served as a shift supervisor of the  
19 operating plant service bulletin?

20 A I could not say how many editions or how many  
21 times I have seen operating plant service bulletins  
22 posted down at the B&W training facility. I was down  
23 there numerous times, and I just recall that I have  
24 seen it on their poster alongside the menu.

25 Q The menu to the cafeteria?

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Mehler

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2 A Yes.

3 Q The times when you saw the operating  
4 plant service bulletin, did you recognize it  
5 each time as being the same edition of the operating  
6 plant service bulletin?

7 A I don't recall if it was or wasn't.

8 Q Do you know whether there was a practice  
9 to post each operating plant service bulletin as  
10 they were received on the island?

11 A I don't know if it was a practice or not.

12 Q Other than posted on the bulletin  
13 board -- is this actually in the Training Department,  
14 this bulletin board?

15 A As you go back to the hallway in the  
16 simulator, it would be on your left before the first  
17 classroom.

18 Q When you say "Training Department,"  
19 you are talking about the Training Department at B&W?

20 A Yes.

21 Q I was not clear on that. Perhaps the record  
22 is.

23 Have you ever seen an operating plant  
24 service bulletin outside of the one you saw posted  
25 on the bulletin board at B&W?

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A Not that I recall.

Q You don't recall having been routed this document as you mentioned you had been routed the clearing house documents?

A Not that I recall.

Q You don't recall whether these documents were available for review in the TMI Training Department?

A I don't know.

(Recess taken.)

1  
2 Q Could you describe for me the location of  
3 information concerning the status of the reactor  
4 coolant drain tank in the Unit 2 Control Room on the  
5 day of the accident at Three Mile Island.

6 MR. GLASSMAN: Are you asking for the  
7 witness' present knowledge or for his recollection  
8 of what he knew about the location of information  
9 at that time?

10 MR. BENEDICT: For his present knowledge as  
11 to where the location of that information was on  
12 that date.

13 A I don't recall the actual panel number or name,  
14 but facing north, if you would enter the Control Room  
15 by the west door, bear slightly left, that would be the  
16 west direction, the panel with the drain tank information  
17 was almost directly outside the bathroom door.

18 Q Is the reactor coolant drain tank  
19 information on what is called a back panel?

20 A Yes, it is.

21 Q What is a back panel?

22 A We refer to back panel as the panels located on  
23 the west side of the Unit 2 Control Room that faced west  
24 that would require an operator to walk around to look at  
25 them.

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Q So standing in the center of the TMI-2 Control Room, you could not see the instrumentation on the reactor coolant drain tank panel, is that right?

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4

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A No, you could not.

6

7

Q Does the reactor coolant drain tank panel at Unit 2 have annunciator alarms on it?

8

A To the best of my recollection, I believe it does.

9

10

Q Would those annunciator alarms be visible to someone standing in the center of the Unit 2 Control Room?

11

12

A No, they would not.

13

14

Q They face toward the west wall on a westerly located panel, is that correct?

15

A Yes.

16

17

Q That is true of all of the indications with respect to the reactor coolant drain tank, is that right?

18

19

A That's correct.

20

21

Q Are all the reactor coolant drain tank indicators grouped together?

22

A I don't recall.

23

24

Q Do you know whether the annunciators that appear on the reactor coolant drain tank panel are duplicated in some location where they would be visible

25

2 from the center of the Control Room at Unit 2?

3 A I don't think you can read anything standing in  
4 the center of the Unit 2 Control Room.

5 Q Not limiting it to reading, I was questioning  
6 rather the photographs I have seen of the Unit 2 Control  
7 Room show an array of annunciators which are visible if  
8 you are standing at the central control panel, is that  
9 correct? The low panel in the center.

10 A At the console center, standing there you can  
11 see all the overhead annunciators. Some of them you  
12 cannot read from standing at that point. You would have  
13 to move either left or right to read them.

14 Q Standing at the control console? Is that  
15 what you call it?

16 A Console center is what has the diamond panel on  
17 it.

18 Q Standing at console center, can you see the  
19 annunciators that are located, just to clarify the  
20 record, can you see any of the instrumentation including  
21 the annunciators which are located on the reactor  
22 coolant drain tank panel? Can you see the instrument  
23 itself?

24 A No, you can't.

25 Q Do you know whether any of the annunciators

1

2 which are on the reactor coolant drain tank and are not  
3 visible from the console center are repeated on any of  
4 the arrays that are visible from the console center?

5 A Not to my knowledge.

6 Q Where is the information concerning the  
7 status of the reactor coolant drain tank located in  
8 TMI-1's Control Room?

9 A It is located on what they refer to as the liquid  
10 waste disposal panel.

11 Q Where is that panel located?

12 A Entering the Control Room from the security door,  
13 if you walk directly back of the hallway and enter from  
14 the westmost door to the Control Room, you hit the  
15 liquid waste disposal panel. You open the door and you  
16 can stick out your hand and hit the back of it.

17 Q Is the liquid waste disposal panel a back  
18 panel as we used the term earlier?

19 A We never referred to it as a back panel on Unit  
20 1.

21 Q Do the instruments and indications on the  
22 liquid waste disposal panel which relate to the reactor  
23 coolant drain tank face in toward the center of the  
24 Control Room on Unit 1?

25 A Yes, they do.

1  
2 Q Are there on this liquid waste disposal  
3 panel any annunciators with respect to the status of  
4 the reactor coolant drain tank?

5 A Yes, there is.

6 Q Is there a position in the Unit 1 Control  
7 Room which is referred to as console center?

8 A Yes, we refer to the same position in Unit 1 as  
9 console center directly over the diamond panel.

10 Q Standing in console center at Unit 1, can  
11 you see the annunciators for the reactor coolant drain  
12 tank?

13 A You can see the annunciators standing at console  
14 center but you would not be able to read them.

15 Q When you say "read them," you wouldn't be  
16 able to read what the words were on the window itself?

17 A That's correct.

18 Q But you could see they were illuminated or  
19 flashing, is that correct?

20 A Yes.

21 Q But you would have to approach the panel to  
22 read what the words were on that alarm?

23 A Yes.

24 Q The position of the reactor coolant drain  
25 tank information which you have described to me as being

2 on Unit 1, was that position which you have described  
3 to me the position on the day of the accident at Three  
4 Mile Island? Unit 1.

5 A The locations?

6 Q Yes.

7 A To the best of my knowledge, that has been the  
8 location of that instrumentation since I have been a  
9 CRO up there.

10 Q Have there been any changes made to the  
11 location of the reactor coolant drain tank information  
12 on Unit 1 since the day of the Three Mile Island  
13 accident?

14 A No, there hasn't.

15 Q Have there been any changes made to the  
16 location of the reactor coolant drain tank information  
17 on Unit 2 in the Unit 2 Control Room since the day of  
18 the accident?

19 A To the best of my recollection, no, there hasn't.

20 Q Are there currently staffing requirements  
21 for the Unit 2 Control Room?

22 A To the best of my recollection, yes.

23 Q Are the plant parameters which must be  
24 reviewed on a day-to-day basis with respect to Unit 2  
25 reviewed from the Unit 2 Control Room these days?

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2 A I cannot answer that question because I haven't  
3 been associated with Unit 2 for approximately the last  
4 year and a half. I don't know what is in the Mode 6  
5 technical specs of Unit 2.

6 Q You have not been assigned to serve as a  
7 shift supervisor on Unit 2 for the last year and a  
8 half, is that what you meant?

9 A Approximately the last year and a half.

10 Q Sometime since the accident?

11 A Roughly three to four months after the accident,  
12 I have been disassociated with Unit 2.

13 Q Your entire duties have been focused at Unit  
14 1, is that correct?

15 A That's correct.

16 Q Prior to the accident at Three Mile Island,  
17 had any licensed individual voiced concern or a complaint  
18 about the location of the reactor coolant drain tank  
19 information in the Unit 2 Control Room?

20 A Prior to 1979?

21 Q Prior to the accident at Three Mile Island  
22 on March 28th?

23 A Not to my knowledge.

24 Q Had anyone, whether licensed or not, voiced  
25 any complaints or comments or concerns about the

2 location of the reactor coolant drain tank information?

3 A Not to my knowledge.

4 Q Does the Unit 1 Control Room have any panels  
5 where the instrumentation or annunciators face away from  
6 console center?

7 A There are no panels on Unit 1 that do not face  
8 towards the center of the room. There are some panels  
9 that cannot be seen from the center of the room without  
10 going behind the upright panels behind the console.

11 Q Is this a freestanding upright panel when you  
12 say behind the console?

13 A Directly behind the console panel, you have what  
14 they refer to as panel PC, PL, PL left and PL right.  
15 Directly behind those panels there are some indications  
16 and panels that are associated with the auxiliary  
17 transformers, the main transformer, and the main  
18 generator that have indications on them. You would  
19 have -- it would require you to walk back to look at  
20 them.

21 Q Are there any annunciators which pertain to  
22 the nuclear steam supply system in Unit 1 which are not  
23 visible from console center?

24 A None that I know of.

25 Q If I understand your testimony, you have

2 said that Unit 1 does not have any back panels, as you  
3 have used that expression, in its Control Room, is that  
4 correct?

5 A We do not refer to any panels in Unit 1 as back  
6 panels.

7 Q There are no panels in Unit 1 where the  
8 instrumentation or annunciator windows face away from  
9 console center, is that right?

10 A None to my knowledge.

11 Q What other than in Unit 2 Control Room, what  
12 other than the reactor coolant drain tank panel is a  
13 back panel?

14 A To the best of my recollection, it would be the  
15 panels associated with the ventilation systems.

16 Q Ventilation of what? Do you mean the  
17 air-conditioning for the Control Room?

18 A It would be the fans associated with the auxiliary  
19 building; the fuel handling building, the reactor  
20 building, and I would assume there are some miscellaneous  
21 back there also. That is all I can recall at this time.

22 Q Other than the panel containing ventilating  
23 information, with respect to ventilation, are there any  
24 other back panels in the Unit 2 Control Room?

25 A You would find your RPS cabinets also located back

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2 behind there, and their indication you could not see in  
3 Unit 2 either.

4 Q RPS stands for Reactor Protection System?

5 A Yes.

6 Q What indicators are on this RPS panel that  
7 you referred to?

8 A It would just be indication lights for the  
9 different channels, whether they were tripped or not;  
10 also reactor trip associated with the reactor. It also  
11 indicates whether you have the fans to cool the panels  
12 running.

13 Q There is, I take it, information which is  
14 visible or indicators which are visible from console  
15 center in Unit 2 pertaining to the status of the Reactor  
16 Protection System?

17 A Yes.

18 Q This back panel is not the sole source of  
19 information about the Reactor Protection System?

20 A No, it is not. You would get an annunciator in the  
21 front which on receiving you would acknowledge and then  
22 you have to go back to the panel to find out the cause.

23 Q To your knowledge, is the back panel that  
24 contains the reactor coolant drain tank information the  
25 sole source of information with respect to the status

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of the reactor coolant drain tank?

MR. GLASSMAN: Asked and answered.

Objection.

MR. BENEDICT: Will you allow him to answer?

MR. GLASSMAN: Yes, to get on with it.

A To the best of my recollection, yes, it is.

Q You recognized prior to the accident at Three Mile Island that the Control Room for Unit 1 and the Control Room for Unit 2 were different, did you not, in their layout and the amount of information presented to the operators?

MR. GLASSMAN: Objection.

There has been testimony as to certain differences. I will allow the witness to give his understanding, his knowledge as to either of these two, but it is inappropriate to ask him what his mental thought processes are.

MR. BENEDICT: I just couldn't disagree with you more. As your partner, Mr. Seltzer, said, the state of a man's mind is as much a fact as the state of his digestion. I am asking a very simple question. Whether prior to the accident at Three Mile Island, Mr. Mehler recognized that the TMI-1 Control Room was different from the TMI-2 Control

2 Room in its layout and in the amount and method  
3 of information presented to the operators. A very  
4 simple question.

5 MR. GLASSMAN: You are asking this in a  
6 general sense?

7 MR. BENEDICT: I am asking if he recognized  
8 that prior to the accident.

9 MR. GLASSMAN: I am not sure what you mean by  
10 "recognized," but he can answer.

11 (Record read)

12 A Yes, I recognized there were differences between  
13 the Control Rooms.

14 Q Of the people who were assigned to your  
15 shift, the licensed individuals assigned to your shift,  
16 in the month, let's say, prior to the Three Mile Island  
17 accident, were any of those people licensed on both Unit  
18 1 and Unit 2?

19 A The people assigned to my shift one month prior to  
20 the Unit 2 accident were only licensed on Unit 2.

21 Q Were there any licensed individuals at  
22 Metropolitan Edison prior to the Three Mile Island  
23 accident who were licensed on Unit 1 and Unit 2  
24 simultaneously who were not shift supervisors?

25 A Yes.

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Q Were all six shift supervisors licensed on both Units 1 and 2 simultaneously prior to the Three Mile Island accident?

A To the best of my recollection, all six shift supervisors were licensed on both units.

Q Other than those six individuals, who else held licenses simultaneously on Unit 1 and Unit 2 prior to the accident?

A The best I can recall is Jim Floyd held a license on both units and so did Mike Ross.

Q Were those licenses, to the best of your knowledge, up to date or in force on the day of the accident at Three Mile Island?

A Yes, they were.

Q Were they senior reactor operator licenses?

A Yes, they were.

Q You said the six shift supervisors were licensed simultaneously on both Unit 1 and Unit 2 prior to the Three Mile Island accident, is that right?

MR. GLASSMAN: He is asking for your knowledge.

A If you consider the word "simultaneously" at the same time, I would say yes.

Q Did each of those shift supervisors hold a

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senior reactor operator's license which was valid on each of the units?

A To clear up your understanding of the senior operator license, it was one license pertaining to both units, not a license for each unit.

Q In light of that, did each of the shift supervisors, the six shift supervisors, who served in that capacity at the date of the accident on March 28th, did each of them hold a senior reactor operator's license valid for both Unit 1 and Unit 2?

A To the best of my recollection, yes.

Q So to the best of your recollection, prior to the Three Mile Island accident, the only people who held licenses applicable to both Unit 1 and Unit 2 were the six shift supervisors plus Mr. Floyd and Mr. Ross; those are the only people you know?

A Those are all that I can recall at this time.

(continued on next page)

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Q Prior to the Three Mile Island accident, did anyone ever say to you or comment to you on the difference between the Unit 1 and Unit 2 control rooms with respect to the amount of information presented to the operators in each of those control rooms.

A I do not recall any specific conversations between anyone. I know that I have had conversations with other individuals. I can't recall who they were, but as I previously stated, I liked Unit 1 better, and anyone that was just licensed on Unit 2, they would argue with me that they liked Unit 2.

Q Do you recall whether anyone said to you in words or substance, agreed with your view that Unit 1 was better than Unit 2 in its control room layout?

A I don't recall anyone agreeing with me. I don't recall anyone disagreeing with me either.

Q Do you recall anyone whom you voiced this view to prior to the Three Mile Island accident?

A No, I don't recall.

Q Do you recall whether you discussed it with Mr. Ross?

A No, I don't recall.

Q Or Mr. Floyd?

A No, I don't recall.

2 Q Do you recall discussing it with any of the  
3 five other shift supervisors?

4 A I don't recall discussing it with any specific  
5 individual.

6 Q Did you hold the view that the Unit 1 control  
7 room was better laid out than the Unit 2 control room  
8 prior to the Three Mile Island accident?

9 MR. GLASSMAN: Objection. I don't know  
10 what you mean by the word "better."

11 If you would like to ask him for any specific  
12 discussions he had --

13 MR. BENEDICT: I am simply referring back  
14 to Mr. Mehler's prior testimony. If he used the  
15 words "liked it more" or "liked it better," I  
16 will be happy to go back to his testimony, but  
17 I am trying to get at whether he held this view  
18 that he expressed earlier in the testimony prior  
19 to the accident at Three Mile Island.

20 (Record read by the reporter.)

21 MR. GLASSMAN: I repeat my objection, because  
22 I am not sure what you mean by the word "better"  
23 but the witness can answer whether he had a  
24 preference.

25 A It was my opinion that I felt at home better or

1  
2 more at ease in the Unit 1 control room, and I would  
3 have to make that assumption, because I was there  
4 since it was built, where I was only in Unit 2 for  
5 approximately three years prior to the accident.

6 I also have a feeling that the operators that  
7 spent all their time in Unit 2 would have preferred  
8 Unit 2 over Unit 1.

9 Q Do you base that feeling, as you call it,  
10 about the views of the Unit 2 operators on conversations  
11 you had with people who spent all their time in Unit 2?

12 A I don't recall the actual conversation or who it  
13 was with, but I know in general conversation, I would  
14 say, "Boy, I like Unit 1 better," and they would say,  
15 "Boy, are you screwed up."

16 Q Do you remember any such general conversations  
17 in which your interloquator agreed with you that Unit 1  
18 was better?

19 MR. GLASSMAN: What interloquator?

20 MR. BENEDICT: The person with whom he  
21 spoke.

22 A Yes, any Unit 1 operator.

23 Q Do you remember any particular individual?

24 A Not really.

25 Q Have you ever heard to this day of a law,

2 a regulation, called 10 CFR Part 21.

3 A I have heard of 10 CFR Part 21. I don't recall  
4 what is in that regulation.

5 Q Do you recall whether you heard of 10 CFR  
6 Part 21 prior to the accident at Three Mile Island?

7 A I believe I have.

8 Q Do you recall whether you received any  
9 training with respect to this regulation prior to the  
10 accident at Three Mile Island?

11 A Since I do not recall exactly what 10 CFR 21 is,  
12 it would be very hard for me to recall if I received  
13 any training on it prior to March 28, 1979.

14 Q Would it refresh your recollection if I told  
15 you that 10 CFR Part 21 is concerned with the reporting  
16 of certain information to the Nuclear Regulatory  
17 Commission?

18 A I know of that. I didn't know it was in 21.

19 Q Have you ever heard of a law or rule or  
20 regulation called 10 CFR Part 50.55 E?

21 A I have heard of 10 CFR 55, but the "E" throws me  
22 a curve.

23 Q Other than the regulation I mentioned earlier,  
24 the 10 CFR Part 21, have you heard of any other rules or  
25 regulations promulgated by the NRC which relate to

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reporting of information to the NRC?

MR. GLASSMAN: Objection.

I don't know that the witness had any specific testimony here as to 10 CFR 50.55 E.

MR. BENEDICT: I couldn't agree with you more. I am asking whether he knows of any regulation whether it is called 50.55 E or anything else other than 10 CFR Part 21 which imposes requirements with respect to the reporting of information to the NRC.

I would like the question read back.

MR. GLASSMAN: The original question or the one you just posed?

MR. BENEDICT: Let's try the original question.

(Record read by the reporter.)

A I do not know nor have I memorized all the 10 CFR 20, 21, 90,50, the numerous ones they have got, and I could not say at this time which one has all the reporting requirements, because each individual one has requirements.

Q So you are aware, then, that there are rules and regulations other than 10 CFR Part 21 that relate to reporting requirements but you couldn't identify them

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by number?

A No, I could not.

Q Turning to what has been marked previously as -- I show you B&W Exhibit 235 for identification which document is your resume we discussed on Tuesday.

I would like you to turn to the third page from the back and about the middle of that computer run, it states -- the first letter or letters are obliterated-- it states "Port of Defects and Noncompliances Law 10 CFR 21," and it states under the hours column, .5 and under the complete date column 02/01/78.

Does this refresh your recollection as to 10 CFR Part 21?

A No, it does not.

Q Do you recall receiving any training on 10 CFR Part 21?

A No, I do not.

Q Do you recall receiving any training on 10 CFR Part 21 since the accident?

A No, I do not.

Q I would like to show you a document that has been marked as B&W Exhibit 248 for identification.

(One-page document entitled "Title 10 Code of Federal Regulations Part 21 - Reporting of

2

Defects and Noncompliance," marked as B&W Exhibit  
No. 248 for identification, as of this date.)

3

4

Q Do you recognize what has been marked as

5

B&W Exhibit 248 as a copy of a notice that is posted or

6

was posted prior to the Three Mile Island accident in

7

the control room of TMI 2?

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A No.

9

Q Do you recognize this document, Exhibit 248,

10

as being a copy of a document posted anywhere on the

11

Three Mile Island facility?

12

MR. GLASSMAN: At any time?

13

MR. BENEDICT: Let's start prior to the

14

Three Mile Island accident.

15

A I do not recall seeing this document posted --

16

Q Do you recall --

17

A -- anywhere on TMI at this time.

18

Q You don't recall at this time whether you

19

have ever seen this document posted at any time?

20

A I can't say with any certainty that I have ever

21

seen this document posted.

22

Q This document which reads at the top "Title

23

10 Code of Federal Regulations Part 21 - Reporting of

24

Defects and Noncompliance," have you ever seen this

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document other than as a posted document?

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2 A Not that I recall.

3

Q You don't recall ever seeing this document  
4 up to today?

5

Is that your testimony?

6

A I don't recall seeing this document other than  
7 today.

8

Q Reviewing the portion of the text immediately  
9 following the words in quotation -- the word in quotation  
10 "noncompliance," does that refresh your recollection as  
11 to the contents of any training that you received with  
12 respect to 10 CFR Part 21 or other reporting requirements?

13

A No.

14

Q Do you recall any training prior to the  
15 accident at Three Mile Island on March 28th which you  
16 received with respect to your responsibilities in  
17 reporting defects and noncompliance with NRC requirements?

18

MR. GLASSMAN: Objection.

19

Insofar as the question has a conclusion  
20 regarding Mr. Mehler's responsibilities. I assume  
21 there is no assumption meant in the question.

22

MR. BENEDICT: Are you taking the position  
23 that Mr. Mehler has no responsibilities in terms  
24 of complying with any requirements of the NRC?

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MR. GLASSMAN: I am not taking any such

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position.

MR. BENEDICT: Then you are just knit-picking  
and trying to foul up the record is what you  
are doing.

(Continued on the following page.)

2 Q Is it your understanding that you have some  
3 responsibility with respect to reporting defects and  
4 noncompliance with requirements of the NRC?

5 Is it your understanding today that you have  
6 some responsibilities in those regards as an employee  
7 of Met Ed?

8 A The answer would be, yes, but I would not sit here  
9 and tell you that I knew it was under Part 21.

10 Q Did you understand that you had some  
11 responsibilities for reporting noncompliance and defects  
12 prior to the Three Mile Island accident?

13 A Yes.

14 Q Now that I have laid my foundation, can I  
15 have my question answered.

16 (Record read by the reporter.)

17 "Question: Do you recall any training  
18 prior to the accident at Three Mile Island on  
19 March 28th which you received with respect to  
20 your responsibilities in reporting defects and  
21 noncompliance with NRC requirements?"

22 A I do not recall when I received training or exactly  
23 what was in the training, but I am quite sure I received  
24 training on 10 CFR 21, 10 CFR 50, 10 CFR 90 at some  
25 period of time in my employment down at Three Mile Island.

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Q Do you remember who provided you with that training? Who was the trainer or lecturer?

3

4

A I don't have the slightest idea who it was.

5

6

Q Do you recall whether it was in the form of a lecture or whether it was in the form of a presentation to you of written material or both?

7

8

A I don't recall.

9

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Q Do you recall whether you did receive any written material with respect to your responsibilities for reporting non-compliance with NRC regulations?

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A I have received written material. I do not recall what the written material was about anymore. I am quite sure I had pieces from the different CFR's, but I cannot say at this time exactly what it was anymore.

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Q Are you testifying you do recall receiving some written material with respect to whatever statutory requirements there are? I don't want to be limited to whether it was about 10 CFR 21 or some other section. Do you remember receiving written material on that subject?

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A I know I have received written material.

Q Do you recall whether you received material

2 on that subject prior to the Three Mile Island  
3 accident?

4 A I am quite sure I have received written  
5 material. I remember vaguely, it defines operator  
6 at the control, REM's, the whole bit, and  
7 it is in one of them.

8 Q Do you still have those or any of those  
9 documents in your possession?

10 A I don't know.

11 Q When you reviewed your material for  
12 production at the request of your attorneys in  
13 this case, do you recall seeing any documents pertaining  
14 to your obligations or responsibilities with respect  
15 to compliance with these reporting requirements or  
16 copies of the regulations themselves?

17 A I do not recall if I did or didn't.

18 Q Did you consider it part of your  
19 responsibilities in the production of documents in  
20 this litigation to produce documents that you had  
21 in your possession pertaining to that subject?

22 A I am not sure if I thought about this  
23 particular subject, whether it would be pertaining  
24 to the litigation or not. I am not even sure  
25 that I had documents at the time I turned in the

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material. I may have turned it in under miscellaneous.

Q If you were to set out to look for that material relating to your responsibilities under the reporting requirements, where would you look? The material that you have in your possession? Where among your files in your office and at home would you look?

A I would probably look under training material or miscellaneous.

Q Do you keep files that are headed that way in your office?

A I have some files in my office headed "Training Materials," 1979, 1980 and at the end of the year, I go through it and throw it away.

Q Do you have any materials other than the material we discussed you had in your attic when we talked about this subject on Tuesday? Do you recall whether you have any other materials on training at home?

A I don't believe I have anything at home other than what I discussed with you. I believe it was Tuesday. That particular material was material I received in the original 48 week which I don't think was covered under the letter by the attorneys.

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Q I was excluding from the question the material we had already discussed. I was getting into the question whether you had other material that if you were looking for material that you have receiving relating to your responsibilities for reporting defects and non-compliance, whether you had any material at home that you would review for that purpose.

A Not to my knowledge.

Q In your time working for Metropolitan Edison, have you ever been on duty during a PORV actuation?

A I cannot say with any certainty that I was there or that I wasn't there when a PORV actuated.

Q Can you recall --

A I know that I worked on Unit 1 for I don't know how many years, and I am quite sure at some period of time the PORV did actuate. I don't recall it happening.

Q Limiting my question to PORV actuations as a result of reaching its standard operating set point, can you remember any instance where you were on shift when such an occurrence took place on either Units 1 or 2?

1  
2 MR. GLASSMAN: Objection. Lack of  
3 foundation, but I will let him answer.

4 A I cannot recall with any certainty that I  
5 could relate to you the incident at which it happened,  
6 because I just don't remember ever running over there  
7 and looking at the PORV and saying, "Let's log this  
8 down. I have to remember this later."

9 Q In the time that you have served as a  
10 licensed operator for either Unit 1 or Unit 2, what  
11 is your estimate of the number of times that the  
12 PORV actuated as a result of pressure reaching  
13 the PORV set point?

14 MR. GLASSMAN: Objection insofar as it asks  
15 for a guess or speculation.

16 MR. BENEDICT: I am not. I am asking for  
17 his professional estimate.

18 MR. GLASSMAN: I do not know what you  
19 mean by his professional estimate. If he has  
20 a recollection of an approximate number, he  
21 can give it.

22 A I cannot give that answer because I would only  
23 be guessing. In all the time I worked in TMI-1 as  
24 a CRO, I never had a reactor trip, so I don't recall  
25 high pressure. I am not saying I didn't have it. I

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I don't want to guess at any numbers.

(continued on next page)

2 Q Did you ever have a reactor trip while  
3 you were on duty on Unit 2?

4 A To the best of my recollection, I think I had  
5 two.

6 Q Were either of those reactor trips as a  
7 result of high pressure?

8 A I don't recall what caused the reactor to trip.

9 Q On either occasion?

10 A On either occasion. That was only a guess  
11 that there were two of them. I may find out it was  
12 three or four. To the best of my recollection, it  
13 couldn't have been much more than two.

14 Q What is the runback capability on the Unit  
15 1 and Unit 2 reactors?

16 A Under what conditions?

17 Q Under, let's say, power operations over  
18 50 percent thermal.

19 MR. GLASSMAN: Are you asking for the  
20 witness' knowledge?

21 MR. BENEDICT: Present understanding of what  
22 the system -- the predicate to some questions.  
23 I just want to establish --

24 MR. GLASSMAN: You are asking about its  
25 design capability?

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MR. BENEDICT: What his understanding

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is of the runback feature.

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A When you refer to the runback feature, there are runbacks installed within the ICS in both units based on certain conditions. That would be the rate

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which would be fed into the ICS for the plant to run back. If you are talking about the physical limitations of the reactor itself to reduce power, that is altogether another thing.

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Q Maybe I can focus it more. It is true, is it not, that the B&W system design which the 177 lowered loop design, which is the design at Unit 1 and Unit 2, has the capacity to prevent a reactor trip as a result of certain secondary side upsets by running back or reducing the thermal output of the reactor's core automatically?

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MR. GLASSMAN: Is that a question?

MR. BENEDICT: Yes.

A It has been tested on Unit 1 that I can recall. It has to the best of my recollection run back from 100 percent power to 15 percent power without tripping the primary side of the plant on some occasions. On other occasions it didn't meet that requirement and it did trip.

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Q Do you recall on the occasions you spoke of where power was run back and a trip was prevented what the initiating cause of the runback was?

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A No, I do not recall. The only one is when we actually tested it for B&W.

6

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Q Do you recall how you initiated an upset if an upset was initiated?

8

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A No, I do not recall how it was done. I would only have to make an assumption that we opened the generator breakers.

10

11

12

Q And that was on Unit 1, you said?

13

A Yes.

14

Q Do you know of any instance in which Unit 2 ran back automatically as a result of an upset on the secondary side of the system?

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16

17

A And the reactor stayed on the line?

18

Q Yes.

19

A I don't recall any.

20

Q Can you say today that it never happened at Unit 2?

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A No, I cannot say that.

23

Q You simply don't know?

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A I don't know.

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Q What, if any, training were you provided

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prior to the accident at Three Mile Island with respect to the expected discharge line temperatures that would result from a lift of the PORV when the reactor was critical?

A I don't recall any training that specified the temperature of the tailpipe when the PORV lifted.

Q Do you recall any training with respect to the issue of how fast the tailpipe temperatures would decay following the close of a PORV after it had lifted during critical operation of the reactor?

A I don't recall. Was that prior to --

Q Prior to the Three Mile Island accident in 1979.

A I don't recall receiving that information.

Q Do you know what a Technical Data Report is?

A No.

Q I would like to show you a document that has been marked as B&W Exhibit 249 for identification.

This document, the first page of which has written in hand in the upper left-hand corner TDR-092, and then on a printed form it says "GPU Service Technical Data Report."

2

Seeing this document, does this refresh your recollection as to what a Technical Data Report is?

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(Document entitled "GPU Service Technical Data Report," bearing handwritten number TDR-092 marked B&W Exhibit 249 for identification, as of this date.)

9

A I believe I have seen this type of document.

10

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Q Do you believe that prior to the Three Mile Island accident you saw Technical Data Reports prepared by GPU Service or some other GPU company?

13

14

A I could not say with any certainty that I have seen it prior to the Three Mile Island accident.

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Q Could you review this document and tell me whether you have ever seen this particular Technical Data Report?

18

A I don't recall seeing this document.

19

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Q This document is dated -- the only date on the front page that I see is July 3rd, 1979, and the document title is "Adequacy of Existing Temperature Detectors on the Pressurizer Relief Valve Discharge Lines." I failed to read that title in earlier.

25

Is that the document you have in front

2 of you?

3 A Yes.

4 Q You testified you don't recall ever seeing  
5 this document before.

6 Has any of the information concerning  
7 the response time of the thermal couple detectors  
8 on the PORV discharge line contained in this report  
9 ever come to your attention?

10 A I believe during the training program it was  
11 brought to our attention that it takes longer for  
12 the temperature to go down after it closes.

13 Q The training which you are testifying about is  
14 training you recall occurring prior to the accident  
15 at Three Mile Island?

16 A No, this was after the accident at Three Mile  
17 Island.

18 Q Do you recall receiving any training prior  
19 to the accident at Three Mile Island pertaining  
20 to the response time on the thermal couple detectors  
21 on the PORV discharge line?

22 A I don't recall any training on the temperature  
23 detector response time prior to the accident.

24 Q Do you recall any training on the absolute  
25 temperatures you should expect to see as a result of a

2 PORV lift at critical operation?

3 A No, I do not recall any training on the  
4 temperature that would be expected when the PORV  
5 lifted.

6 Q Does your testimony cover training you  
7 received prior to the accident as well as training  
8 you received since then? In other words, in any  
9 training you received up to today, do you recall  
10 ever receiving any training with respect to the  
11 temperatures to be expected as the result of a lift  
12 of the PORV during critical operation?

13 A Let me clarify all the answers. Prior to  
14 March 28, 1979, I do not recall any training that I  
15 received on the thermal couple temperature range  
16 that would be expected when the PORV lifted or the  
17 time response, both when it lifted and after it reset.  
18 I have received training but I do not recall exactly  
19 when, but it has been since the Unit 2 accident, on  
20 what to expect to see in the thermal couple when it  
21 lifts and also that it will take longer for the  
22 temperature to decay off after the PORV closes.

23 Q What was the contents of that training  
24 that you received since the accident? What were the  
25 specifics you can recall of that training?

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A All I can recall is that it takes a longer time for the temperature to decay down after the PORV closes, and approximately the maximum temperature you will see at the thermal couple if my memory is correct is roughly 287 degrees, which prior to the accident I would have not expected it to go that low. I would have expected it to be higher.

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Q Was the maximum temperature you were told about in training, did that assume an extended opening of the PORV?

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A I don't know what it assumed.

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Q You don't know what length of time it assumed the PORV would remain open in order to reach that maximum temperature?

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A No.

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Q Who gave you this training?

A I don't recall who gave it to us whether it was the Met Ed instructors or some of the GPU Service reps coming up.

24

25

Q Do you remember that it was -- you received the training from someone employed by GPU or the Met Ed companies?

A To the best of my recollection, it was them.

Q Did they provide you with any written

2 material in connection with this training? Traces,  
3 perhaps?

4 A I don't recall if they did or didn't.

5 Q Do you understand when I say "traces,"  
6 I mean graphs?

7 A I understand what you mean.

8 Q Was this training you received with respect  
9 to the PORV following the Three Mile Island accident  
10 part of training on broader subject matters, or was  
11 this discrete or separate?

12 A It was not a discrete and separate item. I don't  
13 recall what the subject matter was, and I don't recall,  
14 it could possibly have been during the ORP program.

15 Q Each letter stands for a word?

16 A Yes. I forget what they stand for.

17 Q Operator Retraining Program?

18 A Something like that.

19 Q You testified that maximum temperature  
20 you recall this training informed you would be reached  
21 on the thermal couple on the discharge line for the  
22 PORV would be 287, is that correct, or approximately  
23 that number?

24 A The best that I can recall that is the number  
25 that sticks in my head.

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Q Were you surprised by that temperature when you were told that that was the maximum temperature that would be reached?

A If someone would have asked me prior to that knowledge what kind of temperature I would have expected to see, I probably would have said somewhere in the range of 600 because the water in the pressurizer at normal pressure would be 648.

(Continued on following page.)

1  
2 Q What is the normal pressure for the reactor  
3 at TMI-2 when it is critical?

4 A 2155.

5 Q Is the temperature you gave for the  
6 pressurizer water the temperature that corresponds to  
7 the saturation temperature at 2155 pounds?

8 A I believe if you check the books, it will be  
9 648 degrees.

10 Q Prior to the accident, or prior to your  
11 receipt of this training with respect to what to expect  
12 on the discharge line thermal couples, it was your  
13 expectation that the temperature of the fluid flowing  
14 downstream from the PORV would reach the temperature of  
15 the fluid within the pressurizer, is that correct, or  
16 approach that temperature at least?

17 A You keep using the word "fluid."

18 Q The fluid, as I understand it, encompasses  
19 both the gaseous and liquid state of a chemical, and I  
20 meant to include both of them.

21 MR. GLASSMAN: The question seemed to be  
22 directed to a period of time just prior to this  
23 post-accident training.

24 MR. BENEDICT: I mean if his expectations  
25 changed at any time prior.

1  
2 MR. GLASSMAN: I don't know if he had any  
3 knowledge or understanding prior.

4 MR. BENEDICT: He testified that he did. I  
5 am just trying to clarify his testimony.

6 Let's hear the question again.

7 (Record read)

8 A Prior to receiving that training where, to the  
9 best of my recollection, it said the temperature would  
10 reach 287 degrees, I don't recall any training or anyone  
11 voicing a temperature to me before, and I just made the  
12 assumption, I guess, which proves wrong at this time that  
13 the temperature seen on the thermal couple when either  
14 the codes or the PORV opened would approach in the  
15 neighborhood of 600 degrees, whether steam or fluid was  
16 passing through it.

17 Q Steam or liquid?

18 A Or liquid.

19 Q Did you receive any training during your  
20 time on the site with respect to fluid flow and heat  
21 transfer?

22 MR. GLASSMAN: What time period?

23 MR. BENEDICT: Prior to the Three Mile  
24 Island accident.

25 A I do not recall if I did or didn't.

1  
2 Q Prior to the Three Mile Island accident, did  
3 you know that the orifice of the PORV was smaller in  
4 diameter than the discharge line connected to it  
5 downstream?

6 A I don't recall knowing that information.

7 Q You don't recall knowing that the PORV inside  
8 diameter for the orifice or area of the orifice was  
9 smaller than the inside diameter or area of the discharge  
10 line into which it released whatever was released from  
11 the pressurizer?

12 A I don't recall being aware of that information. If  
13 I could look at a one line, maybe I can determine it was  
14 a 2 inch valve and 2-1/2 inch line.

15 Q In other words, the diagrams would show  
16 that?

17 A It may and it may not.

18 Q Did you receive training prior to the Three  
19 Mile Island accident which told you that expanding steam  
20 cools?

21 A I don't recall if I did or didn't.

22 Q Do you recall any discussion of thermal  
23 hydraulics or thermal dynamics and the concept of  
24 a gas expanding requiring the absorption of energy?

25 A I don't recall. Is that prior to the accident?

2 Q Yes.

3 A I don't recall.

4 Q Do you today know that steam as it expands  
5 cools as a physical law?

6 A I never really gave it much thought.

7 Q I can sympathize with that, but focusing on  
8 the narrow question, do you today know that fact?

9 A I have received training as of today on that fact.

10 Q When you say "as of today," you mean you have  
11 received that training after the accident at Three Mile  
12 Island?

13 A Yes.

14 Q Was that training provided by Met Ed or GPU  
15 employees?

16 A I could not say that for a fact or whether it was  
17 one of the various subcontractors that we brought in  
18 during the program. It could have been NUS. They could  
19 have trained me. I can't say for a fact which  
20 particular group trained me.

21 Q You do, however, recall, that that training  
22 was received since the Three Mile Island accident?

23 A We have had quite an extensive training program  
24 since the accident.

25 Q The training that you recall receiving, which

2 included information which told you that steam when it  
3 expands cools, was that training theoretical training or  
4 was it training focused specifically on the nuclear steam  
5 supply systems at Three Mile Island?

6 A It was theoretical training.

7 Q Do you recall whether you received any  
8 handouts or documents with respect to this -- is it fair  
9 to classify this as thermal dynamic training?

10 A I would think it could fall in thermal dynamic, heat  
11 transfer, or what is the other good word they also use,  
12 thermal hydraulic. It could have fallen under any of  
13 those three subjects.

14 Q Prior to the accident at Three Mile Island,  
15 did you receive any training, theoretical training, on  
16 the subject of thermal dynamics, thermal hydraulics, or  
17 heat transfer?

18 A Not that I recall. I do not recall those words  
19 being used in the program prior to the accident. I am  
20 not saying that we did not have some subjects that  
21 taught that.

22 Q Not focusing on the words that I used, but  
23 rather asking you to compare the contents of the training  
24 you received after the accident which we have been  
25 calling thermal dynamic, theoretical thermal dynamics

1  
2 training and the training you received before the  
3 accident, did you receive training similar to that  
4 before the accident in content or in structure?

5 A I do not recall the exact training, but I can  
6 recall one incident way back in the 48-week program where  
7 it would have to have something to do with heat transfer,  
8 because it struck me quite funny, because one question  
9 asked was what was specific heat, so that would fall  
10 under heat transfer, and they did talk about the Reynolds  
11 number, laminer flow. I don't recall the exact lecture  
12 or what it was all about, but those subjects had been  
13 touched on periodically.

14 Q Earlier in your testimony, you indicated  
15 that the saturation temperature of water at 2,155 pounds  
16 per square inch was approximately 648 degrees.

17 What other saturation pressure and  
18 temperature relationships have you committed to memory?

19 A Prior to or after?

20 Q Prior to the Three Mile Island accident.

21 A I would say the only one that I can really recall  
22 with any certainty would be roughly 532 is equal to like  
23 900 PSI.

24 Q Do you remember that relationship because  
25 that is the normal operating condition of the steam

2 generators?

3 A I think that more or less sticks in my head when you  
4 actually heat the plant up with pump heat and you roughly  
5 get the 532 primary temperature and your steam generators  
6 will be at 885 PSIG or 900 PSIA.

7 Q Did you prior to the accident commit to  
8 memory the operating temperature and pressure for the  
9 steam generators on the TMI-2 facility?

10 A The --

11 Q Did you commit to memory the normal operating  
12 temperature and pressure for the steam generator on the  
13 TMI-2 facility?

14 A At 100 percent power?

15 Q Yes.

16 A Yes, I knew then. Roughly the secondary steam side  
17 pressure would be 885. Actually coming out in the steam  
18 generator, it would be somewhat higher. Roughly in the  
19 neighborhood of 910. It would be anywhere in the  
20 neighborhood of 570 to 590 degrees Fahrenheit.

21 Q Is that the temperature of the steam at the  
22 outlet of the steam generator or is that the saturation  
23 temperature at that pressure?

24 A That is the temperature of the steam. I would not  
25 say if it is the outlet of the steam generator or the

1  
2 inlet of the turbine.

3 Q Is it your understanding under normal  
4 operation, the once-through steam generators at Unit 2  
5 operated with a superheat component?

6 MR. GLASSMAN: We are talking about his  
7 understanding today.

8 Q What is your understanding prior to the  
9 Three Mile Island accident that the steam generators at  
10 Unit 2 operated with a superheat component to the steam?

11 A Yes, the steam generators did operate in superheat  
12 region. That was part of B&W's guarantee that I think  
13 the number was roughly either 32 or 35 degrees guaranteed.  
14 That is why they installed BTU limits so they could  
15 enforce their guarantee.

16 Q When you say "32" to "35" degrees, you mean  
17 32 to 35 degrees in excess of the saturation temperature  
18 at the pressure?

19 A That would be superheat.

20 Q What did you understand superheat to mean  
21 prior to the accident at Three Mile Island?

22 A Prior to the accident at Three Mile Island,  
23 superheat meant to me the increase in steam temperature  
24 when you had a hundred percent quality steam.

25 Q Do you mean when you exposed 100 percent

2 quality steam to an additional heat source or heat  
3 input?

4 A In other words, you have steam, that is 100 percent.  
5 You get no more phase changes, no more nothing, and the  
6 temperature increases with more heat input.

7 Q By "100 percent quality," it is steam and it  
8 has no liquid phase aspect to it?

9 A That is right.

10 Q There is no water mixed with the steam?

11 A That's correct.

12 Q All the molecules are steam?

13 A Yes.

14 Q In order to obtain superheat, was it your  
15 understanding prior to the Three Mile Island accident  
16 that you had to expose 100 percent quality steam as you  
17 called it to a heat source?

18 A Yes, because you would have to -- if we were -- we  
19 were always taught the different zones in the steam  
20 generator, and, of course, it shows you the bottom phase  
21 and it goes into the nucleate boiling, and then the  
22 film boiling, and then you go into the superheat region.

23 Q Was it your understanding prior to the Three  
24 Mile Island accident within the superheat region you are  
25 talking about in the steam generator, the steam was 100

1

2 percent quality, and the steam in the secondary side was  
3 100 percent quality, and it was passing by or across  
4 tubes filled with hot water?

5 A Yes, that was my understanding.

6 Q Primary side hot water which was hotter than  
7 the steam?

8 A Yes, or you wouldn't get no heat transfer.

9 Q There was heat transfer going from the water  
10 through the tubes in the steam generator to the 100  
11 percent quality steam, and that was what had the superheat  
12 component?

13 A Yes.

14 Q Was it your understanding prior to the Three  
15 Mile Island accident that superheat could not be  
16 achieved where the sole heat source was immersed in  
17 liquid or two-phase water. In other words, where the  
18 heat source was not exposed to 100 percent quality steam?

19 A Is this prior?

20 Q What your understanding was prior to the  
21 accident.

22 A I never really thought about it.

23 Q At any of your training prior to the  
24 accident at Three Mile Island, did you discuss the  
25 existence of superheat conditions within the primary

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system?

A I don't recall ever discussing it in the primary system.

Q Is it your understanding today that super superheated conditions cannot exist where the sole heat source is immersed in liquid or less than 100 percent quality steam?

A That is my belief at this time without sitting down and giving it a lot of thought.

Q But that is your understanding as of this time?

A Yes.

Q You cannot, however, say whether, or can you say whether, you had that same understanding prior to the Three Mile Island accident?

A I don't recall if I did or didn't.

Q You testified earlier that prior to the accident on March 28th, 1979, you had committed to memory the temperature and pressure relationship for saturation at 2155 pounds and 648 degrees, and you testified as well that you had committed to memory the temperature -- prior to the accident, you committed to memory the temperature and pressure relationship of 885 pounds per square inch and 532 degrees, is that correct?

1  
2 A Yes.

3 Q Were there any other temperatures and  
4 pressure relationships that you committed to memory prior  
5 to the accident at Three Mile Island other than, I assume,  
6 atmospheric at 212 degrees?

7 A Roughly, that 545 degrees to roughly 555 is equal  
8 to 1010 pressure.

9 (continued on next page)  
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2 Q Five hundred -- you had committed prior to  
3 the Three Mile Island accident that somewhere around  
4 545 to 555 degrees was the saturation temperature  
5 that corresponded to 1010 pounds per square inch?

6 A Yes. For the simple reason when the reactor  
7 tripped, you add a bias to the ICS. It is, I believe, a  
8 125 pound bias which would take you to 1010 above the  
9 885, and that would let the average go to 545 or 555.

10 Q If I understand you correctly, what you  
11 are saying is that on a reactor trip, the effect of  
12 the reactor trip is to raise the operating pressure  
13 of the once through steam generator secondary side  
14 from 885 to approximately 1010; is that correct?

15 A That's correct.

16 Q And the reason you associate that with  
17 545 to 555 is that is the saturation temperature  
18 at 1010?

19 A That's correct. That is the temperature the  
20 primary system will go to, the average temperature.

21 Q That is the T average that the primary  
22 system will go to because that temperature is  
23 saturation?

24 A It is held constant by the steam generator  
25 pressure.

2 Q In fact, the steam generator pressure or the  
3 steam generator water at 1,010 pounds per square inch is  
4 turning into steam at 545 to 555 degrees?

5 A Yes.

6 Q Had you committed to memory the temperature  
7 pressure relationship for the initiation point of the  
8 high pressure injection system which is as I understand  
9 it, approximately 1,600 pounds?

10 A What point in time?

11 Q Prior to the accident, had you committed  
12 that relationship to memory?

13 A I don't recall if I did or didn't.

14 Q Do you today know the relationship for  
15 the temperature relationship for saturation at the  
16 HPI initiation set point?

17 A 1,600, it is roughly 608 degrees.

18 Q You cannot today say whether you had that  
19 relationship in mind at any time or had memorized that  
20 prior to the accident at Three Mile Island?

21 A No, I cannot.

22 Q What is a steam table?

23 A A steam table is a table at which you can look  
24 at either. You can either base it on temperature  
25 or base it on pressure and see the saturation for

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that. You can also learn the specific heat of the steam. There are numerous things.

Q Among other things, does the steam table indicate the temperature pressure relationship for saturation over a range of temperatures?

A Yes, it does.

Q Do you have or did you prior to the Three Mile Island accident have in your possession a steam table?

A My own personal possession?

Q Yes.

A I don't know if I did.

Q Prior to the Three Mile Island accident, was there a steam table located in the Three Mile Island Unit 2 control room?

A To the best of my knowledge, there it was one kept in the one book cabinet up by the CRO desk.

Q I show you a document that I have marked as B & W Exhibit 250 which reads on the first page "Three Mile Island Nuclear Station Unit 2 Surveillance Procedure, 2301-3D1 RCS Inventory," and in the upper right-hand corner is written "2301-3D1 Revision 3 02/05/79."

Would you turn to the last two pages of

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this exhibit, a steam table?

(Document entitled "Three Mile Island Nuclear Station Unit 2 Surveillance Procedure 2301-3D1 RCS Inventory was marked B & W Exhibit 250 for identification, as of this date.)

A These are pages out of some steam table.

Q The last two pages are marked in the upper right-hand corner 2301-3D1 Revision 3 02/05/79. The next to last page is numbered 31.0, and the last page is numbered 32.0.

You said this was a portion of a steam table, or is this a steam table in its entirety?

A One normally used to start not at atmospheric.

Q The lowest number relationship is 200 pounds and 381 degrees.

A Yes.

Q Are surveillance procedures maintained in the Three Mile Island Unit 2 control room or were they prior to the accident on March 28?

A Yes, they are.

Q Do you know of any other procedures that have a steam table or a portion of a steam table attached to them as a portion of the procedure or an

1  
2 appendix to them.

3 MR. GLASSMAN: I note an objection. The  
4 witness has not identified this entire document.  
5 He was only asked a question regarding the last  
6 two pages.

7 Q Can you identify the document I have put  
8 before you as a revision of a Unit 2 surveillance  
9 procedure numbered 2301-3D1?

10 A This looks like a Unit 2 surveillance procedure.

11 Q There was a pending question.

12 (Question read)

13 ("Question: Do you know of any other  
14 procedures that have a steam table or a portion  
15 of a steam table attached to them as a portion of  
16 the procedure or an appendix to them?")

17 A I don't recall any.

18 Q You don't recall that there are none?  
19 You just don't know one way or the other?

20 A Right. I don't recall if there is some or  
21 there isn't any.

22 Q Prior to the Three Mile Island accident,  
23 did you receive any training or information with  
24 respect to the effect on reactor coolant pump operation

25 (Continued on next page.)

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saturated conditions within the primary system outside of the pressurizer would have?

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4

A I don't understand your question.

5

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Q Did you receive any information with respect to the effect saturated conditions within the primary system would have on the vibration of the reactor coolant pumps during this operation in saturated conditions?

10

A None that I recall.

11

12

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Q Have you since the accident received any training or information with respect to the effect of saturated conditions within the primary system that they have on vibrations experienced by the reactor coolant pumps during the operation?

16

17

18

A I have had training on the reactor coolant pumps on operation in saturated conditions, but I don't recall it being related to vibration.

19

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21

Q What did this training indicate with respect to operating reactor coolant pumps in saturated conditions?

22

23

MR. GLASSMAN: You are talking of the post accident training?

24

25

MR. BENEDICT: Yes.

A Since the accident?

2 Q Yes.

3 A Basically, it said that you can operate the  
4 reactor coolant pumps in a full steam condition.

5 Q Did you learn during that training about  
6 the operation of reactor coolant pumps in anything  
7 between 0 quality steam which I assume is water  
8 and 100 percent quality steam which, as you say,  
9 was 100 percent steam condition?

10 A Whether we are allowed to or what would be  
11 the indication?

12 Q I am only focusing on the fact that you  
13 said you were told you could run the reactor coolant  
14 pumps in a 100 percent steam condition. Were you  
15 told you could run them in any condition less than  
16 100 percent but more than subcooled water?

17 A The new procedures written on inadequate  
18 core cooling tells you that under certain conditions  
19 based on the in-core thermal couple readings that you  
20 run the reactor coolant pumps no matter what, and it  
21 does not stipulate the conditions of the primary  
22 system at that time.

23 Q Prior to the Three Mile Island accident,  
24 you don't recall receiving any training with respect  
25 to the effect on the reactor coolant pumps that saturated

2 conditions in the primary system would have?

3 A No, I don't recall any.

4 Q Do you recall who provided you with the  
5 training post-accident that we have been discussing?

6 A I don't recall who trained me on inadequate  
7 core cooling since the accident.

8 Q Do you recall whether it was an employee  
9 of Metropolitan Edison or a GPU company?

10 A No, I don't recall that.

11 Q Did you receive any training prior to  
12 the Three Mile Island accident with respect to causes of  
13 reactor coolant pump vibration?

14 A I don't recall any specific training that would  
15 be related to the causes of high vibration on the  
16 reactor coolant pumps.

17 Q Do you recall --

18 A I do recall training on securing the reactor  
19 coolant pumps based on vibration.

20 Q In the course of that training or any other  
21 information you collected prior to the Three Mile  
22 Island accident, were you informed that the existence  
23 of steam of saturated conditions within the primary  
24 system could result in reactor coolant pump vibrations?

25 MR. GLASSMAN: Prior to the accident,

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training prior to the accident?

3

MR. BENEDICT: Yes.

4

A I don't recall that.

5

(Time noted: 5:30 p.m.)

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oOo

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Brian A. Mehler

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Subscribed and sworn to

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before me this

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day of , 1981.

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of Counsel

Also Present:

ROBERT P. CANNON

\* \* \*

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2 B R I A N A. M E H L E R, having

3 been previously sworn by a Notary Public, resumed

4 and testified further as follows:

5 EXAMINATION (CONTINUED)

6 BY MR. BENEDICT:

7 Q Mr. Mehler, you understand that your testimony  
8 today continues to be under oath?

9 A Yes, I do.

10 Q On the day of the accident at Unit 2 at  
11 Three Mile Island, March 28, 1979, you arrived on site  
12 about ten of 6:00 in the morning, is that right?

13 A Yes.

14 Q You entered the Unit 2 Control Room sometime  
15 following your arrival on site where you found Mr. Zewe,  
16 Mr. Faust, Mr. Frederick, Mr. Scheimann, Mr. Ross, and  
17 Mr. Bryan, is that right?

18 A The best I recall, the gentlemen were in the  
19 Control Room.

20 Q Sometime after arriving in the Unit 2 Control  
21 Room, you went over to an instrument panel where Mr.  
22 Scheimann was standing and you looked over his shoulder  
23 at the indications on the panel where you saw that  
24 reactor coolant system pressure was low, about 900 PSIG,  
25 pounds per square inch, that the pressurizer was

Mehler

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2 indicating full or off scale high, and that the hot leg  
3 temperatures were pegged high which is 620 degrees, and  
4 the cold leg temperatures were pegged low at 520 degrees,  
5 is that right?

6 MR. GLASSMAN: Can I have that read back?

7 There are a lot of things in that question.

8 MR. BENEDICT: Yes, I agree.

9 MR. GLASSMAN: If you want them separated  
10 out --

11 (Record read)

12 MR. GLASSMAN: Are you asking for the  
13 witness' current recollection of that?

14 MR. BENEDICT: Yes, of course.

15 A To the best of my recollection, that is correct.

16 Q You then concluded either that the  
17 pressurizer heaters weren't functioning or that there  
18 was a leak in the reactor coolant system, is that right?

19 A Those were my thoughts that morning.

20 Q After you had those thoughts, as you say,  
21 you asked Carl Guthrie to check the pressurizer heaters  
22 and confirm that they were working, is that right?

23 A I believe I asked Fred if they checked them, and  
24 he said they did, and upon turning around I saw Carl  
25 enter the room so I asked him to go down and reconfirm

Mehler

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2 that the pressurizer heaters were, in fact, energized.

3

Q The Bill you referred to is Bill Zewe? In  
4 your answer, you referred to having spoken with Bill.

5

A No, I didn't.

6

MR. BENEDICT: I beg your pardon.

7

Q Fred, Fred Scheimann?

8

A Yes.

9

Q The Carl you referred to is Carl Guthrie?

10

A Yes.

11

Q Did Mr. Guthrie leave to do that?

12

A He left. I don't know if he went to do that or  
13 not.

14

Q Following your request to Mr. Guthrie, you  
15 went to the Unit 2 Control Room computer and requested  
16 from the computer the temperature readings for the PORV  
17 discharge line and the two code safety valve discharge  
18 lines, and you received those readings and they showed  
19 that the temperature reading for the PORV was higher  
20 than the temperature readings for either of the code  
21 safety valves, is that right?

22

A To the best of my recollection, yes.

23

Q Based on those temperature readings, you  
24 concluded that the PORV was at least partially open,  
25 is that right?

Mehler

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2 A I believe I discussed it with Mike and Bill.

3 Q Mike Ross and Bill Zewe?

4 A Yes, and then I asked Mr. Scheimann to close  
5 the block valve.

6 Q Following your calling up these temperature  
7 readings from the computer, you asked Mr. Scheimann to  
8 close the block valve which would isolate the PORV from  
9 the remainder of the reactor coolant system, is that  
10 right?

11 A That's correct.

12 Q Did Mr. Scheimann do that?

13 A I believe he did.

14 Q About 30 minutes passed between the time of  
15 your arrival at the Three Mile Island site that morning  
16 and the closure of the block valve on your instructions  
17 to Mr. Scheimann, is that right? That was about 30  
18 minutes?

19 A Oh, it was approximately 30 minutes, yes.

20 Q Mr. Mehler, you are aware, are you not, that  
21 there are technical specification requirements limiting  
22 the amount of leakage from the reactor coolant system  
23 during operating conditions, is that right?

24 A Yes, I am aware.

25 Q One of the limitations is that you must have

Mehler

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2 less than one gallon per minute of unidentified leakage  
3 and that unless that rate is maintained below that level  
4 you are required to take certain actions with respect to  
5 the operating mode of the reactor, is that right?

6 A I would have to look at the standard Tech  
7 Specs which I haven't looked at in the last two years to  
8 really confirm that for a fact. But to the best of my  
9 knowledge, yes, that is a correct statement.

10 MR. BENEDICT: Will you please mark this  
11 next document as Babcock & Wilcox Exhibit Defendants'  
12 251.

13 (Two-page document entitled "Reactor Coolant  
14 System Operational Leakage" was marked B&W Exhibit  
15 251 for identification as of this date.)

16 BY MR. BENEDICT:

17 Q I would like to show you a document that has  
18 been marked for identification as Defendants' Exhibit 251  
19 which is a portion of technical specification 3/4.4.6,  
20 headed "Reactor Coolant System Operational Leakage,  
21 Limiting Condition for Operation."

22 Does this refresh your recollection that the  
23 reactor coolant system leakage shall be limited to one  
24 gallon per minute unidentified leakage during Modes 1, 2,  
25 3 and 4 of operation?

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2 A This looks like a standard Tech Spec that was used  
3 in Unit 2.

4 Q Referring to the lettered subhead "b" under  
5 the heading "Action," which reads: "With any Reactor  
6 Coolant System leakage greater than any one of the above  
7 limits, excluding Pressure Boundary Leakage, reduce the  
8 leakage rate to within limits within 4 hours or be in at  
9 least Hot Standby within the next 6 hours and in Cold  
10 Shutdown within the following 30 hours." Does that  
11 refresh your recollection that there are requirements  
12 about reducing the level of operation if you determine  
13 excessive leakage to exist?

14 A I really don't understand your question.

15 Q My question is only whether you are aware  
16 today that if during modes of operation 1 through 4 you  
17 determine that you have in excess of one gallon of  
18 unidentified leakage, you are required to reduce the  
19 leakage rate to within limits within four hours or be  
20 in at least hot standby within the next 6 hours and in  
21 cold shutdown within the following 30 hours?

22 A If you have a valid leak rate that confirms you  
23 have in excess of one gallon a minute on unidentified,  
24 that section "b" there in the "Action" does apply.

25 Q Turning to the second page of Defendants'

Mehler

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2 Exhibit 251 and looking at subhead "d" which appears  
3 under the heading "Surveillance Requirements, 4.4.6.2  
4 Reactor Coolant System leakages shall be demonstrated to  
5 be within each of the above limits by:" subhead "d.  
6 Performance of a Reactor Coolant System water inventory  
7 balance at least once per 72 hours during steady state  
8 operation," is that your understanding of the  
9 requirements imposed with respect to the determination of  
10 leakage?

11 A You are asking my interpretation of the Tech  
12 Specs --

13 Q I am asking whether you understood you were  
14 required to perform a reactor coolant system water  
15 inventory balance at least once per 72 hours.

16 A Yes, I understood that.

17 Q There is a procedure established which sets  
18 forth the method for conducting this inventory balance,  
19 is that right?

20 A Yes, it is a surveillance procedure.

21 Q Have you ever done a water inventory balance  
22 surveillance test? Have you personally ever run one?

23 A I have run them when I was a CRO in Unit 1.

24 Q Have you ever run them on Unit 2?

25 A Not that I recall that I physically ran it myself.

Mehler

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Q You supervised people who did run them, is that right?

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A People that worked for me did do the leak rates.

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Q In determining the unidentified leakage from the system, is it your understanding of the procedures that you utilized that the procedure in essence subtracts the volume of the reactor coolant drain tank from the measure of volume lost over the same period of time from the makeup tank?

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A I do know that the volume of the drain tank, which I believe is entered in voltage, is put in at the beginning of the leak rate when you are doing the leak rate with the computer itself, also put in at the end of the leak rate to the computer, and that is taken credit for. I do not know if the leak rate itself subtracts that from the makeup tank or if it is a total leak rate balance. It is inventory in and out of the primary system.

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Q Are you aware that as a theoretical matter the procedure relies on the loss of volume from the makeup tank as being total leakage and then identified leakage is that which is that volume which is in the reactor coolant drain tank and other known leaks, and the latter two numbers are then subtracted from the

2 the original lost volume determination from the makeup  
3 tank and that the result is the unidentified leakage?

4 MR. GLASSMAN: Objection. I am not sure  
5 the question is clear, and there is some discussion  
6 there of theoretical matters. I am not sure what  
7 we are talking about.

8 MR. BENEDICT: If you want to hear it back  
9 and try to answer it, and then we will move on to  
10 other things, because I don't think this is  
11 terribly vital.

12 BY MR. BENEDICT:

13 Q If you can answer the question, Mr. Mehler,  
14 I would appreciate it.

15 A I can tell you all the parameters that are taken  
16 into consideration in doing the leak rates. I do not  
17 know if the statement you just made is correct because,  
18 you know, it took a lot of assumptions in there. I do  
19 know going into the leak rate calculation is the drain  
20 tank, is the makeup tank, is the primary temperatures  
21 which all affect the leak rate just by a change in  
22 temperature itself, and that has to be taken into  
23 consideration, taking all these different components into  
24 and factored into it, it will determine whether you have  
25 any leakage.

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Q Is it your understanding that part of the effect of using the procedure is to convert the units, the volumes in the makeup tank, and the reactor coolant drain tank to be consistent? Do you understand that the temperature and pressure relationships affect the volume of a given mass of water?

A Temperature will affect the indicated volume, pressure, to the best of my ability, the type of pressures we are talking about would not affect water. You have to have pressure up in the thousands of pounds before you can really affect water.

Q Affect the volume of a given mass of water?

A Yes.

MR. BENEDICT: I would like to mark as B&W Exhibit 252 a document which is a Three Mile Island Nuclear Station Unit #2 Surveillance Procedure 2301-3D1 RCS Inventory. This indicates it is Revision 3, dated February 5th, 1979.

(Document which is a Three Mile Island Nuclear Station Unit #2 Surveillance Procedure 2301-3D1 RCS Inventory marked B&W Exhibit 252 for identification, as of this date.)

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BY MR. BENEDICT:

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Q I would like you to look at this and tell me whether this procedure, whether or not this particular revision is the procedure that you used to determine leak rates from the reactor coolant system.

8

MR. VOIGT: When?

9

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MR. BENEDICT: At any time prior to the Three Mile Island accident.

11

12

MR. GLASSMAN: What unit are we talking about?

13

MR. BENEDICT: It's a Unit 2 procedure.

14

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A If I understand your question, you are asking is this the particular procedure that was used prior to March 28th and all the time period prior to March 28th?

18

Q Well --

19

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A My answer to that would be no because this is Rev. 3 which is dated 2/5/79.

21

Q Right.

22

A And that's when Rev. 3 came out.

23

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25

Q I appreciate that and I am asking the question somewhat more broadly. The first page of the exhibit indicates the changes made to the various

1  
2 pages. It shows Rev. 0, reading from the first line  
3 in the left column was dated August 19th, 1977. I  
4 don't mean to limit the answer to my question to  
5 this particular procedure, rather the procedure which  
6 you see before you in one of its revisions.

7 MR. GLASSMAN: Do you want to know  
8 whether this was used by Mr. Mehler?

9 MR. BENEDICT: I want to know whether  
10 Mr. Mehler understands this was the procedure  
11 used at Three Mile Island Unit 2 to calculate  
12 leak rates.

13 A To the best of my recollection, that was  
14 the procedure that was used in Unit 2.

15 Q Seeing this procedure does not refresh  
16 your recollection that the procedure in effect  
17 defines inventory loss from the makeup tank as total  
18 leakage?

19 A No, it does not. I never approached it in  
20 those words.

21 Q You did not approach it from a conceptual  
22 or analytical point of view, is that correct? What  
23 I mean is rather you approached it from the point of  
24 view of following the steps as they were set out and  
25 seeing that they were carried out?

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A That is correct.

Q Have you ever seen control room logs or any other documents which record the results of leak rate tests which indicated that such a test had been performed?

MR. GLASSMAN: You are asking about any tests?

MR. BENEDICT: I am talking about any tests for Unit 2.

MR. GLASSMAN: In what time frame?

MR. BENEDICT: Up until the day of the accident after which time I doubt if this procedure was used.

MR. GLASSMAN: You are asking whether the witness has seen them since the accident or --

MR. BENEDICT: No, has he ever seen them.

A All surveillance procedures upon completion are logged in the shift foreman's log and I also believe the CRO log. At some period of time I must have seen them. I do not recall what period of time I have seen them.

Q During the period that you served as a shift supervisor from April 1st and through March

1  
2 28th did you have any responsibility for reviewing  
3 and ascertaining the accuracy of any of the logbooks  
4 that were kept?

5 MR. GLASSMAN: In what time frame?

6 MR. BENEDICT: The period during which  
7 he served as a shift supervisor through to the  
8 day of the accident.

9 MR. GLASSMAN: Can I have the question  
10 back, please.

11 (Record read.)

12 MR. GLASSMAN: Is the question directed  
13 to the accuracy of the logbook in its entirety  
14 or to a particular portion? I am not sure I  
15 understand the import of the question.

16 MR. BENEDICT: Whatever portion he had  
17 responsibility for reviewing if he had any  
18 responsibility. I think my question is clear.

19 MR. GLASSMAN: Is the question directed  
20 to whether Mr. Mehler had responsibility for  
21 reviewing the accuracy of whatever portion  
22 he reviewed in total?

23 MR. BENEDICT: No, my first question  
24 firstly is did he have any such responsibility  
25 and then the question is what responsibility he

2

had.

3

MR. GLASSMAN: Can you break it down?

4

MR. BENEDICT: I think that's what I

5

asked. I will try again.

6

BY MR. BENEDICT:

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Q During the period that you served as a

8

shift supervisor up until the day of the Three Mile

9

Island accident, did you have any responsibility

10

for reviewing logbooks or other reports of surveillance

11

procedures performed?

12

A I do not believe the review of logbooks

13

for accuracy was my responsibility.

14

I do review logbooks to find out what

15

happened on previous shifts. There are periods of

16

time where I have reviewed surveillance procedures

17

when the foreman was busy.

18

Q By "review surveillance procedures," do

19

you mean review the completed entries with respect

20

to the performance of the surveillance procedures?

21

A That is correct.

22

Q Do you know who, if anyone, did have

23

responsibility for reviewing logs, any logs for

24

accuracy during the period when you were a shift

25

supervisor?

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A To the best of my ability, and I cannot say what the requirement was put upon them to do it, but the logs are reviewed by the supervisor of ops. operations.

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Q The supervisor of ops, you mean supervisor of operations, and that was Jim Floyd during this period?

10

11

12

A Yes, it would have been.

13

14

15

Q During the period that you served as a shift foreman, did you serve on Unit 2?

16

17

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A Yes, I did.

19

20

21

22

23

Q And during that period did you keep a shift foreman's log?

24

25

A Yes, I did.

Q Was one of the entries that you understand you were required to make in that log entries pertaining to surveillance procedures performed during your shift?

A Yes, I did.

Q During either the period when you were a shift foreman or a shift supervisor on Unit 2 up to the day of the accident, did you review log entries with respect to your shift?

A I cannot recall that I actually did it because I cannot say that on April 10th or something that I

2 did it. I'm quite sure that I have reviewed our  
3 log entries during the shift.

4 Q And you mean as they were entered on the  
5 day of the shift?

6 A Yes.

7 Q Are the log entries in the control room  
8 log entered all at the end of the shift or are they  
9 entered as the shift proceeds or progresses?

10 A They are normally entered as the shift proceeds.

11 Q During the period that you served on  
12 Unit 2 as a shift foreman or shift supervisor, by the  
13 way, did you ever serve as a control room operator on  
14 Unit 2?

15 A No, I did not.

16 Q Your service on Unit 2 is confined  
17 exclusively to your role as shift foreman and shift  
18 supervisor?

19 A That is correct.

20 Q During the period that you served as  
21 shift foreman and shift supervisor, were you aware  
22 that there was a requirement that all periodic tests  
23 results be entered in the control room log?

24 A I don't know what you define as periodic  
25 tests.

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Q Were you aware that there was a requirement that all the results of tests taken in order to establish leak rates be entered in the control room logs?

MR. GLASSMAN: Which test are you talking about?

MR. BENEDICT: Leak rate tests.

MR. GLASSMAN: Can I have that question read back, please.

(Record read.)

A I cannot state for a fact that I knew there was a requirement for that to be entered into the control room logs but they were entered into the control room logs, all surveillance tests were entered.

Q It is your understanding and recollection that during the period up through the accident at Three Mile Island all surveillance tests made in order to establish the leak rates from the reactor cooling system were logged into the control room log?

A To the best of my ability, all surveillance tests, upon completion and signed that are accurate, are entered into the control room log.

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Q I would like to show you

MR. GLASSMAN: I would like to hear that answer back. There was a word I didn't understand.

(Record read)

MR. BENEDICT: Will you please mark this as B&W Exhibit 253 for identification. It is an Administrative Procedure, Three Mile Island Nuclear Station Administrative Procedure No. 1012 Shift Relief and Log Entries. This particular revision is dated August 11, 1975, and it is Revision 3.

(Three Mile Island Nuclear Station Administrative Procedure No. 1012, Shift Relief and Log Entries, Revision No. 3, dated August 11, 1975, marked B&W Exhibit 253 for identification, as of this date.)

BY MR. BENEDICT:

Q Unlike the operating procedure we marked previously, this procedure does not indicate on its face which unit it applies to.

Do all administrative procedures apply generally to both units?

MR. GLASSMAN: If you know.

A Well, first of all, I would like to make a

1  
2 correction, this is not the complete procedure.

3 The cover page is missing because if you go further  
4 there is a Rev. 8 and a Rev. 6 through the procedure.

5 Q Right.

6 A As of Rev. 3, that's not a complete procedure.

7 Q I agree. This is an incomplete procedure  
8 but for our purposes I think it, the cover page is  
9 missing but I think it will suffice since I seek only  
10 to use it to see if I can refresh your recollection.

11 A I will answer your question now. Prior to  
12 March 28th, 1979, the administrative procedures, to  
13 to the best of my recollection, covered both units.  
14 There may have been a few exceptions.

15 Q Do you have any reason to believe that  
16 this administrative procedure did not apply to both  
17 units?

18 A I have no reason to believe that it didn't.

19 Q Looking at page No. 7.0 and the entry  
20 headed or numbered 3.3.17, which is a subcategory  
21 of heading 3.3 entitled "Control Room Log," and  
22 3.3.1, which says, "This log will contain the  
23 following types of information." Moving to 3.3.17,  
24 "Accomplishment of testing - Record title and number  
25 of the test performed, and the start and completion

2 times or time of suspension of the test. The  
3 performance of all periodic tests and inspections  
4 required by the Technical Specifications shall be  
5 recorded."

6 Does that refresh your recollection that  
7 there was a requirement that all periodic tests and  
8 inspections required by Technical Specifications be  
9 recorded and not just those which you indicated were  
10 qualified in your previous answer?

11 MR. GLASSMAN: Objection. I think earlier  
12 the witness said he didn't even know what the  
13 words "periodic tests" meant.

14 MR. BENEDICT: I have just asked the  
15 witness whether his memory is refreshed.

16 MR. GLASSMAN: There was a combination of  
17 items in your last question. I think it might  
18 be unclear.

19 The witness can answer.

20 A No, it does not refresh my memory.

21 Q Is it your understanding that there is  
22 not a requirement that leak rate tests which were  
23 taken but which indicated leakage over the maximum  
24 amount did not need to be recorded if you subsequently  
25 performed a test which resulted in figures within the

1  
2 acceptable limits.

3 MR. GLASSMAN: Can I have that read back,  
4 please.

5 (Record read.)

6 MR. GLASSMAN: I want it read back once  
7 more, please.

8 (Record read.)

9 MR. GLASSMAN: Objection to the form. I  
10 also don't know what time frame you are asking  
11 for an understanding in.

12 There is a discussion of maximum amount  
13 and leakage rate generally and there are different  
14 kind of leakage rate tests here. I am not sure  
15 the question is clear, but the witness can  
16 answer if he understands it.

17 A If I understand your question correctly, to the  
18 best of my recollection only leak rates that were  
19 deemed valid and that was upon looking at all the  
20 parameters in the plant and making a determination  
21 that there was no changes within the system while  
22 that leak rate was being performed were entered into  
23 the log.

24 Q You are aware, are you not, of times  
25 prior to the accident at Three Mile Island on Unit 2

1  
2 where a leak rate calculation has been performed  
3 which produced a leak rate for either identified  
4 or unidentified leakage which was in excess of tech  
5 Spec limits, isn't that right?

6 MR. GLASSMAN: I am not sure, you are  
7 talking about any test regardless of whether  
8 it's valid or invalid?

9 MR. BENEDICT: I am talking about the  
10 performance of a test.

11 MR. GLASSMAN: And by excess of the  
12 Tech Spec limits --

13 MR. BENEDICT: I am referring to the  
14 Technical Specifications that have been marked  
15 as an exhibit and list five different limitations  
16 on leakage.

17 MR. GLASSMAN: By excess you are not  
18 making a conclusion in the question or assuming  
19 that it is valid or --

20 MR. BENEDICT: No, I am talking about  
21 in excess of the numbers indicated in the  
22 Tech Specs.

23 THE WITNESS: Could I hear that question  
24 back again.

25 (Whereupon, the question was read by the

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reporter as follows:

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"Q You are aware, are you not, of times

prior to the accident at Three Mile Island on

Unit 2 where a leak rate calculation has been

performed which produced a leak rate for either

identified or unidentified leakage which was

in excess of tech spec limits, isn't that right?")

A I am -- to the best of my recollection, I never

recall seeing a leak rate that exceeded the

identifiable leakage.

Q It's your testimony today --

A I have seen leak rates on unidentifiable that

said we made water, they were in the negative side.

I have seen some that were in excess of one gallon

and on them leak rates we were out and looked at the

systems and we identified leakage and measured it

and I believe if you looked at the procedure for

leakage there is an attachment and if I am correct --

is Attachment 3, which allows you to do this and you

can take credit for that leakage to bring the

unidentifiable leakage within tech specs which is

less than one gallon.

Q You are aware of instances where the

procedure for determining unidentifiable leakage was

2 carried out and the result was a figure in excess  
3 of the one gallon maximum provided by the tech specs,  
4 is that right?

5 MR. GLASSMAN: When you say "you are  
6 aware," are you asking for the witness' knowledge  
7 today?

8 MR. BENEDICT: What else could he  
9 testify to, Mr. Glassman? That comment continues  
10 to sort of strike me as being silly.

11 MR. GLASSMAN: I am not sure of what  
12 "aware" means.

13 MR. BENEDICT: It's evident you are not  
14 aware of what's going on here.

15 MR. GLASSMAN: I am not so sure but why  
16 don't you proceed.

17 BY MR. BENEDICT:

18 Q There is a pending question.

19 THE WITNESS: Could I hear the question  
20 again, please.

21 (Record read.)

22 A I am aware of leak rates being run which we  
23 classified upon looking at the other plant parameters  
24 and the conditions of the plant during the duration  
25 of the leak rate that we considered invalid where

2 the unidentified leak rate did exceed one gallon.

3 Q What did you do with the results of the  
4 leak rate tests that you ran which, as you say, you  
5 determined to be invalid and which exceeded the  
6 maximum allowable one gallon per minute leak rate?

7 MR. GLASSMAN: Are you asking for an  
8 invalid test that Mr. Mehler conducted  
9 personally?

10 MR. BENEDICT: I am asking for the  
11 invalid test that he testified that he is aware  
12 of.

13 MR. GLASSMAN: You are asking for what  
14 he did or what someone else did?

15 MR. BENEDICT: I am asking if he was  
16 aware of what was done with those results.

17 MR. GLASSMAN: By whom?

18 MR. BENEDICT: By anyone.

19 MR. GLASSMAN: I object to the form, but  
20 you can answer.

21 A I do not know exactly what was done with them. I  
22 can just make an assumption that they were put in the  
23 garbage can.

24 MR. GLASSMAN: Just note, Mr. Mehler,  
25 that the questions are not asking for your

2           assumptions, they are only asking for your  
3           knowledge.

4           Q       Isn't it true, Mr. Mehler, that you have  
5           told NRC representatives that the records of those  
6           tests were thrown away and you did not qualify your  
7           answer by saying you assumed that that's what happened  
8           to them?

9           A       I don't recall what testimony you are referring  
10          to.

11          Q       Would it refresh your recollection if I  
12          told you it was the testimony which you described to  
13          me earlier in this deposition as testimony concerning  
14          leak rates and estimated critical       positions and  
15          that the interview was held with Mr. Keith Christopher  
16          and Tim Martin in the presence of John Wilson?

17          A       That would not help my recollection because,  
18          to my knowledge, I have never received a transcript  
19          of that testimony. I have received a tape which I  
20          have never listened to.

21          Q       But it is not your recollection that you  
22          told the NRC investigators that in response to a  
23          question by Mr. Martin which was, "We've been told that  
24          leak rate tests that failed--their records were  
25          crumpled up and threw in the trash can, is that true?"

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Your answer was, "Yeah"?

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MR. GLASSMAN: Can I have that read back,

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please.

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(Record read.)

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MR. GLASSMAN: I will object to the

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question. You are talking about whether it is

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not Mr. Mehler's recollection. The way it is

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phrased is improper.

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(Continued on following page.)

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2 Q Were you asked in a question and did  
3 you give that answer?

4 MR. GLASSMAN: In addition I would like  
5 to note that the question attempts to create  
6 some inconsistencies between Mr. Mehler's last  
7 answer and what you just read, we do not know  
8 whether what you have read is or is not an  
9 accurate transcript from what I heard that I  
10 said "we have been told," and that is all it said.

11 MR. BENEDICT: It said, "Is that true,"  
12 and he said, "Yeah".

13 MR. GLASSMAN: I do not know sitting  
14 here what the question refers to, whether  
15 it refers to "we have been told" or something  
16 else. If you would like to ask the witness  
17 for his reaction of the facts, please do so,  
18 but I object to attempting to try to create  
19 an inconsistency where none exists.

20 MR. BENEDICT: I have not. I have asked  
21 him exactly what he recalled but you seem to need  
22 to speechify and horseshed the witness again.  
23 I asked whether that was in his recollection.  
24 I am entitled to ask leading questions in this  
25 deposition and I asked if it refreshed his

1  
2 recollection. Now, all of your wasted speechifying  
3 was nothing more than your effort to advise the  
4 witness how he should answer the next question.  
5 I just find that extraordinarily inappropriate.

6 MR. GLASSMAN: I object to your colloquy.  
7 I think it is inappropriate and I think  
8 you are trying to put assumptions and  
9 inconsistencies in the record where none  
10 exist. It is objectionable in and of itself.

11 MR. BENEDICT: I am asking the witness  
12 for his recollection. I am not trying to  
13 put something in the record that isn't going  
14 to exist anyway.

15 MR. GLASSMAN: If you would like to ask  
16 him for his recollection, please do so and do  
17 so directly so we can get a plain answer on  
18 the record.

19 MR. BENEDICT: I will ask my questions  
20 as I see fit. If you have an objection state  
21 it for the record and then rest quietly.

22 MR. GLASSMAN: I have tried to do that, Mr.  
23 Benedict.

24 MR. BENEDICT: It must have been from a  
25 prior life, Mr. Glassman.

1  
2 MR. BENEDICT: Why don't you reread  
3 and retype the question, please?

4 (Question read)

5 ("Question: But it is not your recollection  
6 that you told the NRC investigators that in  
7 response to a question by Mr. Martin which was,  
8 'We've been told that leak rate tests that  
9 failed--their records were crumpled up and  
10 thrown in the trash can; is that true?")

11 MR. GLASSMAN: The same objection as if  
12 repeated verbatim but I will permit the witness  
13 to answer, if he can.

14 A I do not recall the contents of the interview  
15 by the NRC or the answers given during that interview.

16 As I stated earlier in previous testimony,  
17 I do not even recall the exact time that it took  
18 place. The only thing I do recall is that it did  
19 take place.

20 Q During that interview with or an interview  
21 with NRC representatives, were you asked the question,  
22 "We've been told that leak rate tests that failed  
23 records were crumpled up and thrown in the trash can;  
24 is that true?" and that you answered, "Yeah"?

25 A I do not recall.

2 Q During any interview with the NRC were  
3 you asked the question immediately following the  
4 one that was just read into the record, "Would this  
5 include those that you really count," that is negative,  
6 "couldn't have a valid reason for throwing them out,  
7 that they were greater than one GPM and you had a  
8 gut feeling that it couldn't be there?" You answered,  
9 "I would say yes, you know."

10 MR. GLASSMAN: Objection to the form  
11 insofar as it relates back to some earlier  
12 question and answer that Mr. Mehler did not  
13 recall giving.

14 You may answer the question.

15 A I do not recall the testimony given before  
16 the I & E group and I don't even know what the date  
17 it was given on.

18 Q Would it refresh your recollection if  
19 I told you it was given on March 27th 1980 at 10:08 in  
20 the morning?

21 A No, it would not.

22 MR. BENEDICT: I would like to take two  
23 minutes.

24 (Recess taken)

25 MR. BENEDICT: I would like to mark as

1  
2 Defendants' Exhibit 254 a tape recording provided  
3 to me by one of Mr. Mehler's personal counsel  
4 yesterday morning and I will play a portion  
5 of the tape from the outset which I will not  
6 ask the reporter to record in order to assist  
7 Mr. Mehler, if possible, in refreshing his  
8 recollection about the occurrence of this  
9 interview.

10 (Tape recording was marked Defendants'  
11 Exhibit 254 for identification, as of this  
12 date.)

13 MR. BENECICT: I have set the counter  
14 on the tape recorder at 000 and I will play  
15 the introductory portion and then note the  
16 counter number when I stop. The question I  
17 will ask, so as to put this in some frame, is  
18 whether after hearing the portion I play you  
19 recall this testimony and this interview  
20 taking place.

21 MR. GLASSMAN: Off the record.

22 (Discussion off the record)

23 MR. BENEDICT: We have listened to the  
24 tape and the marking is advanced to 021.

25 Q Mr. Mehler, do you recognize this interview

1  
2 as being the interview which you and I have discussed  
3 earlier in this deposition as the latter of the two  
4 NRC interviews you recall being tape recorded?

5 A I do know that I was interviewed by the NRC  
6 twice that I recall. I could not for certain say  
7 that this is the second interview.

8 Q We have identified the first interview  
9 included a person named Mr. Hunter, and Mr. Hunter  
10 does not appear on this tape.

11 You do not have any reason to believe  
12 that the recording or the portion of the recording  
13 I just played is a recording of the first interview,  
14 that you recall, do you?

15 A No, I do not.

16 Q I am going to advance the tape now to number  
17 137 on the counter and play to you two questions and  
18 answers which I would like the reporter to take down.

19 MR. BENEDICT: It is my understanding  
20 that the first speaker is Mr. Martin.

21 "Question: We've been told that  
22 leak rate tests that failed--their records were  
23 crumpled up and thrown in the trash can; is that  
24 true?"

25 "Answer: "Yeah."

1  
2 "Question: Would this include those  
3 that you really couldn't have a valid reason  
4 for throwing them out, that they were greater  
5 than 1GPM and you had a gut feeling that it  
6 couldn't be there?"

7 "Answer: I would say yes, you know."

8 BY MR. BENEDICT:

9 Q Mr. Mehler, do you recognize your voice  
10 on any portions of the tape I have played?

11 A No.

12 Q Well, somebody at the NRC is going to be  
13 really unhappy you gave that answer.

14 Does hearing the two prior questions  
15 and answers which I just played refresh your  
16 recollection?

17 A No, it does not.

18 Q Isn't it your recollection that you knew  
19 of times when unacceptable results in excess of  
20 the permissible leakage rates under the Tech  
21 Specs were obtained when performing leak rate tests?

22 THE WITNESS: Could I hear it again,  
23 please?

24 (Record read)

25 A Am I aware that at times we got results that

2 exceeded the one GPM unidentified leak rate per  
3 Tech Specs.

4           When these were received we would check  
5 the whole plant to determine whether it was in  
6 steady state during the duration of the leak rate  
7 test and check if there was any unknown changes that  
8 would make that leak rate erroneous or invalid, and  
9 to the best of of my recollection most of the time or  
10 if not all the time there was usually a plant upset  
11 or a change in temperature, power, which would make  
12 the leak rate invalid and at that point we would  
13 not turn the leak rate in because it served no useful  
14 purpose.

15           Q       Isn't it true that there were times  
16 where the documentation of test results which showed  
17 excessive leakage were thrown away or destroyed or  
18 not logged into the control room log?

19           A       As I previously stated, only leak rates that  
20 were determined accurate after checking all the  
21 parameters in the plant during the duration that the  
22 leak rate was run, upon determining that it was  
23 an accurate leak rate would it be signed and logged.

24           Q       Isn't it true that results of tests where  
25 you did not have a valid reason for throwing them

1

2 out, where the tests showed rates in excess of the one GPM  
3 maximum, that that documentation was thrown out or  
4 destroyed?

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MR. GLASSMAN: May I have that read back,

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please?

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(Question read)

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MR. BENEDICT: I want to strike that

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question. I will restate it because I used

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the word "thrown out" twice.

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(continued on next page)

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2 BY MR. BENEDICT:

3 Q Isn't it true that documentation for leak  
4 rates in excess of one gallon per minute were thrown  
5 out, the documentation was destroyed even where you did  
6 not have a valid reason for rejecting the results of  
7 that leak rate test?

8 MR. GLASSMAN: Are you asking for what  
9 this witness did or what he has heard or what  
10 he knew? I am not sure.

11 MR. BENEDICT: My question is clear as to  
12 what I am asking for. If you would like to  
13 have it read back for the witness, go ahead,  
14 but stop prompting the witness.

15 MR. GLASSMAN: I would like to have it  
16 read back because --

17 MR. BENEDICT: Because you are going to  
18 prompt the witness.

19 MR. GLASSMAN: No, he previously testified  
20 to when he did tests and when he supervised them  
21 and the different roles at different times.

22 I just want to make sure what the  
23 question is in the context of the answer.

24 MR. BENEDICT: Why don't you retype the  
25 question here, please and read it back.

1  
2 (Record read by the reporter.)

3 "Question: Isn't it true that documentation  
4 for leak rates in excess of one gallon per minute  
5 were thrown out, the documentation was destroyed  
6 even where you did not have a valid reason for  
7 rejecting the results of that leak rate test?"

8 MR. GLASSMAN: My objection as previously  
9 stated should be deemed to have been repeated  
10 here.

11 A If I recall the question correctly, not to my  
12 knowledge was the leak rates thrown out that there was  
13 not determined a reason for it to be greater than one  
14 GPM.

15 Q I would like to play again for you a portion  
16 of the tape that I just played to you which begins with  
17 a question by Mr. Martin and ask you if this refreshes  
18 your recollection.

19 "Question: Would this include those that  
20 you really couldn't have a valid reason for throwing  
21 them out, that they were greater than one GPM and  
22 you had a gut feeling that it couldn't be there?

23 "Answer: I would say, yes. You know."

24 Does hearing that question and answer  
25 refresh your recollection that among the

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documentation of results of tests, leak tests which showed leakage indexes of the one gallon per minute, unidentified leakage that were thrown out, that included documentation pertaining to leak tests that you did not have a valid reason for rejecting the conclusions thereof?

A It does not refresh my recollection at all.

Q Do you have any reason to believe that you were not asked that question and did not give that answer?

A I have no reason to believe that I was not asked that question or I gave that answer.

Q Was it your understanding, prior to the Three Mile Island accident, that the technical specification pertaining to excessive leakage from the reactor coolant system required that upon the receipt of any tests results showing excessive leakage you or the operators were required to comply with the action statements set forth in the tech spec?

MR. GLASSMAN: I would like to have that read back, please.

(Record read by the reporter.)

A It was my understanding that I interpreted the tech specs to read that upon receiving and verifying

Mehler

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2 of valid leak rate that you would comply with the  
3 Action Statement B. There were numerous occasions  
4 where we --

5 Q Just to clarify the record, when you say  
6 "the Action Statement B," you are referring to what  
7 has previously been marked B&W 251, the first page, is  
8 that correct, under the words "Action," it says  
9 subheading "B," is that correct?

10 A That is correct.

11 Q I am sorry, I interrupted you. Go ahead.

12 A There were numerous occasions where we received  
13 leak rates that said we produced water while we were  
14 at power.

15 Q In other words, you got a number that was  
16 in the negative?

17 A That is correct. And that's against the law of  
18 nature, you know. So I am quite sure that tech spec  
19 didn't want us to take credit for something like that.

20 In the same token, that if the make-up tank  
21 level didn't go down, the pressurizer didn't go down  
22 and nothing else changed in the system and it showed a  
23 leak rate of five gallons, it could pretty well determine  
24 that that was not a true leak rate, that somewhere there  
25 was an erroneous input and I am quite sure that tech

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spec was not intended for that purpose.

Q Was it your understanding that if you did do the calculations as called for by the procedure and received a number excess of the one gallon maximum for for unidentified leakage that you then moved into the action statement?

MR. GLASSMAN: I think that has been asked and answered.

A Upon verifying that that was a good and accurate leak rate.

Q It was not your understanding that upon receiving any leak rate result where the leak rate test had been performed pursuant to the procedure that was in excess of the maximum allowed leaks, that you then were into the Action Statement and had only four hours within which to reduce the leakage to a rate within limits as is set in paragraph B of the first page of Defendants' 251?

MR. GLASSMAN: Just so it is clear, the word "any" that you used in your last question refer to what Mr. Mehler has characterized as an invalid test as well as a valid test.

MR. BENEDICT: I mean a test which was performed pursuant to the procedures set forth

Mehler

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2 for Unit 2 leak rate test.

3 MR. GLASSMAN: Obviously Mr. Mehler  
4 has given you testimony with regard to those  
5 tests and the nature of the results. I just  
6 want to make clear that you are including the  
7 whole spectrum of those tests regardless of  
8 whether they are valid or invalid when you say  
9 "any."

10 MR. BENEDICT: I press my question as I have  
11 said it for the record.

12 I don't -- I do know why you are trying to  
13 confuse the record, I think it is in --

14 MR. GLASSMAN: I wanted to try to clarify  
15 it, not confuse it. The witness can answer.

16 MR. BENEDICT: Why don't you read and  
17 retype the question here, please.

18 (Record read by the reporter.)

19 "Question: It was not your understanding  
20 that upon receiving any leak rate result where  
21 the leak rate test had been performed pursuant to  
22 the procedure that was in excess of the maximum  
23 allowed leaks, that you then were into the  
24 Action Statement and had only four hours within  
25 which to reduce the leakage to a rate within

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2 limits as is set in paragraph B of the first  
3 page of Defendants' 251?"

4 MR. GLASSMAN: The same objection is noted.  
5 The witness may answer.

6 A If I understand your question correctly, it was  
7 part of my job to interpret the tech specs, I did not  
8 consider any leak rate that was done to put us in the  
9 action statement unless upon receiving that leak rate  
10 and checking the plant and all the parameters associated  
11 with the plant that that leak rate was a valid leak  
12 rate. Upon determining that it was a valid leak rate  
13 and it did exceed our tech spec limitations, we would  
14 be into Action Statement B and there were numerous  
15 times where we did go into Action Statement B, we went  
16 out into the plant and checked the system and we had  
17 found leakage identified, filled out attachment 3 by the  
18 procedure, took credit for that leakage and proceeded  
19 to get out of action statement B.

20 There were other times where we got leak  
21 rates that were, in my opinion, invalid due to the  
22 possibility that the plant could not make water and  
23 I did not consider that part of going into Action  
24 Statement B and I did not consider them valid leak rates.

25 Q Well, if the plant were to make water, it

Mehler

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2 would not be a measure in excess of a gallon of leakage  
3 since it would, in fact, have a negative leakage, is  
4 that correct?

5 A That is correct, but it also proved that there  
6 are times where the leak rates that do come out can be  
7 considered invalid.

8 Q When you say "come out," is it true that at  
9 least under certain operating conditions for the Three  
10 Mile Island Unit 2 reactor, the computer will run the  
11 leak rate test after it has been provided with certain  
12 parameters?

13 A To my knowledge, to do the leak rate test you  
14 would have to request it of the computer and if I recall  
15 correctly, it would ask you the duration you would want  
16 to run the leak rate test with a limitation that the  
17 minimum would have to be at least one hour, I think  
18 the computer would ask you for the drain tank voltage  
19 upon the beginning -- upon the beginning of a leak rate,  
20 after the duration you requested it would also ask you  
21 the voltage of the RC drain tank and I believe it also  
22 asked you has any water been added during this leak rate  
23 and then it would take all these factors into  
24 consideration and then determine its leak rate.

25 Q Having given the computer the information

2 that it is required to be given pursuant to the procedure,  
3 what would you receive from the computer?

4           Would you receive a printout that would  
5 give you a gallons per minute measurement for  
6 unidentified leakage?

7 A       If my memory serves me correctly, since I haven't  
8 seen one since '78, I mean, no, '79, I believe it printed  
9 out total leakage, identifiable leakage and unidentifiable  
10 leakage.

11       Q       It gave those figures in numbers related  
12 to gallons per minute?

13 A       That is correct.

14       Q       So it would give, following the unidentified  
15 leakage, it would give some figure which would represent  
16 a fraction of a gallon or perhaps more than a gallon  
17 of water flowing at a rate of per minute flowing?

18 A       Yes. There were also times where it proved that  
19 you were negative gallons.

20       Q       Was there any time when you received from  
21 the computer a figure that exceeded one gallon per  
22 minute for unidentified leakage?

23 A       Yes, there were times.

24       Q       Was it your understanding that the  
25 technical specifications required you to move into the

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Action Statement B?

A As I repeated previously, that when we would receive a leak rate in excess of one gallon unidentified or exceeding any parameters or receive a leakage rate, period, we would check the plant stability during the plant that the leak rate was run and based upon this we would determine if we considered the leak rate when it came out -- as it comes out of the computer accurate or inaccurate.

If there was stable conditions for the duration of the leak rate and it exceeded the tech spec limitations, we would consider it accurate. Upon that point, we would enter action statement B.

Q Merely upon the receipt of numbers from the computer indicating a leakage in excess of one gallon per minute for unidentified leakage, you did not understand the tech spec to require you to move into Action Statement B, is that correct?

A That was not my interpretation of the tech specs where that you were not required to go into Action Statement B until it was determined that you actually had greater than the tech spec limitations.

(Continued on the following page.)

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Q Was there any time limitation from the time you first received figures from the computer which indicated leakage in excess of one gallon per minute for unidentified leakage within which you had to perform tests or procedures to establish the invalidity of that number according to the tech specs?

A I do not believe tech specs gave you a time limit to do that particular function. It would not take you very long to perform that function because all the parameters are in the plant, in the Control Room.

Q It was not therefor your understanding that upon the receipt simply of the numbers from the computer which indicated a leak rate in excess of one gallon per minute for unidentified leakage that you were required to reduce the leakage rate to within limits within four hours or be in, at least, hot standby within the next six hours and cold shutdown within the following 30 hours, did you not see the time limitations beginning at that point?

MR. GLASSMAN: If I understand the question properly, I think it has been asked and answered a few times already, but if the witness can understand this version I will let you proceed once more.

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A It was my interpretation of the tech specs that the time limit would only be in effect when you determined you had a valid leak rate, not upon the computer printing out a leak rate in excess of the limitations of tech specs.

Quite frequently, if you would scan the information off, from the computer, on the leak rate, it would -- you could find an erroneous number in there that the computer made a mistake, and I am quite sure you would not want to go into Action Statement "b" with a fallacy out of the computer.

Q I would like to play for you a portion of testimony from what has been marked as Defendants' Exhibit 254, and the tape recorder indicator is at approximately 144, and I would like to play three questions and answers beginning with, as I understand it, Mr. Martin is speaking.

Mr. Martin: "Okay, I'm going to try to go through an educational process here again. This, I think is the tech spec I think we're referring to, 3452 or 62, and particularly the 1 gpm leakage and my question to you is, given that the computer program has generated an indicatedly greater than 1 gpm, and that you cannot rationalize why it is

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2 invalid, why are you not immediately kicked into  
3 the Action Statement?"

4 The Witness: "You would be, but you can run  
5 another leak rate, you could go on and determine  
6 if you have any identifiable leakage."

7 Mr. Martin: "But you're still in the Action  
8 Statement at that point and if you do not find  
9 something within 6 hours you gotta go down, you  
10 gotta do what it says here,..." --

11 The Witness: "Yes."

12 Mr. Martin: -- "...is that correct?"

13 The Witness: "That is what it says, yes.  
14 That's correct."

15 Mr. Martin: "Is that what was done?"

16 The Witness: "We've always got a good one in  
17 that time period."

18 MR. GLASSMAN: Do you want to play that  
19 whole thing again.

20 MR. BENEDICT: Sure.

21 Off the record.

22 (Discussion off the record.)

23 MR. BENEDICT: The counter on the recorder  
24 indicates 157 at the end of the three questions and  
25 answers I just set forth.

BY MR. BENEDICT:

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Q Were you asked those questions and did you give those answers to representatives of the NRC?

A I do not recall that interview or the questions or answers given.

Q Having had, with this segment of the tape, an opportunity to hear longer statements by a voice I recognize as being yours, can you identify it as being yours at this point?

A No, I could not.

MR. GLASSMAN: Just note that while counsel may recognize something, I am not sure whether or not that is worth anything.

MR. BENEDICT: Mr. Glassman, will you stop mucking up the record. Do you get paid by the word or something? What is it with you?

MR. GLASSMAN: I think you are trying to muck up the record by talking about what you do or don't recognize. We are not admitting or denying anything here, but it is you who is trying to --

MR. BENEDICT: I am entitled to ask leading questions. I could have asked him, "That is your voice, is it not?"

MR. GLASSMAN: That is the right question to ask.

Mehler

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2 MR. BENEDICT: Why don't you let me try to  
3 proceed so we can finish up and get out of here.  
4 I have come to the conclusion in the course of the  
5 last four days that you must be paid by the word.  
6 There is no other explanation for your rambling on.

7 MR. GLASSMAN: I have come to many other  
8 conclusions about your questioning and I don't  
9 really care to repeat them here on the record. I  
10 would rather stay more civil and continue.

11 MR. BENEDICT: Fine, why don't we continue  
12 in this case.

13 BY MR. BENEDICT:

14 Q Does hearing the portion that I just played  
15 to you refresh your recollection that it was your  
16 understanding that upon the receipt of a number given,  
17 that the computer program had generated a number  
18 indicating greater than one gallon per minute and a  
19 number that you could not rationalize as being invalid  
20 that you were, in fact, moved into the Action Statement  
21 and within the time limitations imposed thereon, thereby?

22 THE WITNESS: Can I hear the beginning of the  
23 question? I don't know if he is asking me if I  
24 recalled or that is the way I feel now.

25 MR. BENEDICT: Why don't we hear the question

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again, please?

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(Record read)

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A Hearing the tape does not help me in recalling.

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Q You have testified that you recall events where the computer presented you with a number in excess of one gallon per minute for unidentified leakage, you have testified that there were certain steps you took or your shift took in response to that.

What steps did you take in response to the receipt of a number in excess of one gallon per minute for unidentified leakage from the computer?

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MR. GLASSMAN: At what point in time are we talking about now? Are we talking about Mr.

Mehler personally now as opposed to a supervisor?

The reason I raise this is because the beginning of your question talked about various periods, and now you are talking about what Mr. Mehler did and I think it is a conglomerate question.

MR. BENEDICT: Why don't we hear the question again, please.

(Record read)

BY MR. BENEDICT:

Q What steps were taken in response to such numbers?

Mehler

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MR. GLASSMAN: By whom?

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MR. BENEDICT: By anyone that Mr. Mehler knows about.

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MR. GLASSMAN: I object to that form in its generality -- excuse me, I object to that question in its generality.

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Just before, you asked what steps Mr. Mehler took; now you are asking about what anybody took.

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MR. BENEDICT: I was responding to your observation, the use of the word "you," which in the English language doesn't identify as a plural or singular, was unclear, and I have tried to identify it. If you don't like how I have clarified the record, I suggest that you brought it upon yourself.

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MR. GLASSMAN: I think you fuzzed it rather than clarified it, but if the witness understands what is being asked of him at this precise moment, he can answer.

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THE WITNESS: I am totally confused.

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MR. BENEDICT: I think that is exactly the state your counsel seeks to keep you in as well.

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Why don't we hear the question and my clarification again, and try to get an answer to

Mehler

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2 this so we can move on.

3 (Record read)

4 MR. GLASSMAN: I will repeat my objection.

5 MR. BENEDICT: By anyone as to whom Mr.  
6 Mehler has knowledge. I can't expect Mr. Mehler  
7 to testify about someone whom he doesn't have  
8 knowledge about, despite the fact that you seem  
9 to think that is a possibility.

10 MR. GLASSMAN: The question, your question,  
11 as phrased, it could call for an assumption or a  
12 guess.

13 MR. BENEDICT: I assume you have prepared  
14 your witness that assumptions and guesses are not  
15 what we are looking for here. We are looking for  
16 facts.

17 MR. GLASSMAN: Absolutely.

18 MR. BENEDICT: Let's stop this foolishness.

19 MR. GLASSMAN: This colloquy is totally  
20 unnecessary.

21 MR. BENEDICT: Well --

22 MR. GLASSMAN: All I am trying to do here is  
23 clarify, because at one point you asked the question  
24 for what steps Mr. Mehler took, and another point  
25 you asked, what steps in general were taken, and

Mehler

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2 they are different questions, and the state of  
3 the record is unclear. If you will tell us right  
4 now what you want, I will let Mr. Mehler answer. I  
5 am just trying to make sure that the record states  
6 which information you are asking for. You seem to  
7 have gone back and forth.

8 MR. BENEDICT: Baloney.

9 (continued on next page)  
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Q Mr. Mehler, have you been able to hold the question in mind through your counsel's ramblings? And if you can, please give me an answer to it?

A I will try to answer the questions.

As I previously stated, there were times at which we received leak rates greater than one GPM or exceeding the tech spec limitations.

I do not recall the exact days and times, minutes, when we received them.

Upon receiving a leak rate -- and I cannot say who did it, when it was done, exactly everything that was looked at -- but we would look at the plant parameters to ensure that the plant was stable, and we had no upsets or no additions during the duration of the leak rate.

I cannot say with any certainty that I did it every time, that someone did it every time because I do not recall each specific incident at which this occurred, but that was the general practice.

You would evaluate your leak rate by checking the plant parameters before you would consider it a good and accurate leak rate and sign it and turn it in as such.

Q Following doing such checks, what

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2 would your next step be?

3 A If you read the procedure, it said to run a  
4 second leak rate. It also tells you to go out and  
5 look, check the plant for packing leaks, valve leaks,  
6 any numerous type of leaks and take credit for that  
7 leakage which would be unidentifiable at that time  
8 but upon finding it and identifying it and filling  
9 out attachment 3, you can take credit for it as  
10 being identifiable leakage.

11 Q Does that mean you can then subtract  
12 that leakage from the number that you had for unidentified  
13 leakage?

14 A That is correct. And it was done.

15 Q Would you run the computer again on the  
16 numbers? Would you run another leak rate test  
17 through the computer after you had gotten one that  
18 indicated a leakage rate higher than the tech specs  
19 permitted for unidentified leakage?

20 A We normally would plug in another leak rate.

21 Q Do you remember any occasions while you  
22 served on Unit 2 where the second time you ran the  
23 computer, you got a number in excess of one gallon  
24 per minute maximum for unidentified leakage?

25 A I do not recall.

2 Q Do you recall any time during your time  
3 on the Unit 2 facility where procedure to determine  
4 excess leakage was run more than twice within any  
5 72-hour period?

6 A Normally we tried to do leak rates on a shiftly  
7 basis wherever possible so that that would be in excess  
8 of 72 hours.

9 Q Normally it was your standard practice  
10 or it was the standard practice at Three Mile Island  
11 Unit 2 to conduct a leak rate test every eight hours?

12 A Wherever possible. Normally it wasn't done in  
13 the daylight shift because the computer would be tied  
14 up. Other plant evolutions may keep you from running  
15 one on other shifts but it was the general practice  
16 to try and run a leak rate on a shiftly basis.

17 Q When you served as shift foreman on Unit 2,  
18 did you make entries in the shift foreman's log?

19 A Yes, I did.

20 Q Did you make any entries in the shift  
21 foreman's log with respect to tests performed to  
22 determine leak rates from the reactor coolant system?

23 A I do not recall if I had to log in leak rates  
24 when I was a shift foreman in Unit 2 because I do not  
25 recall if we were greater than 525 while I was a

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shift foreman in Unit 2.

MR. BENEDICT: Off the record.

(Discussion off the record.)

(Recess taken.)

BY MR. BENEDICT:

Q Referring to what's previously been marked as Defendants' Exhibit 253 for identification, and turning to page 2.1, which is headed 2.2, which is a subhead of the responsibilities section, it reads, "The Supervisor of Operations shall be responsible for the review, approval and storage of the logs and records. The Supervisor of Operators (or his designee) shall review the control room log and the shift foreman's log a minimum of once per week and document the review by initials or signature. The Supervisor of Operations shall institute action where necessary to correct any deficiencies in the recording techniques or significant operating abnormalities adverse to quality and determine the cause of such significant operating abnormalities which have occurred since his last review of the shift foreman's log. Significant abnormalities are defined as plant conditions which have potential for affecting the health and safety of the public."

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You have testified that Mr. Floyd was the supervisor of operations for the Three Mile Island Unit 2 facility on the day of the accident.

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Was Mr. Floyd the supervisor of operations for the entire period of the time that you were assigned to TMI Unit 2 as either a shift foreman or a shift supervisor?

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A To the best of my recollection, yes.

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Q Was there any period during the time that you were assigned to Unit 2 that you acted as Mr. Floyd's designee to review the control room log and shift foreman's log?

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A Not that I recall.

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Q Did you ever tell Mr. Floyd that it was your understanding that the only test results that needed to be logged were test results which you had determined to be valid?

19

A Not that I recall.

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Q Do you know whether Mr. Floyd knew that that was the practice at least of you?

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MR. GLASSMAN: Are you asking for this witness' knowledge of Mr. Floyd's state of mind?

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MR. BENEDICT: I am asking for what Mr. Mehler knows. He can't testify to what he

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2 does not know.

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4 MR. GLASSMAN: I realize that, and that's  
5 why I am objecting to the question. He can  
6 testify to anything he said to Mr. Floyd but  
7 I don't know how he can testify as to  
8 Mr. Floyd --

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9 MR. BENEDICT: Maybe Mr. Floyd said something  
10 to him. I am entitled to ask that question,  
11 Mr. Glassman. It's not an improper question.

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12 MR. GLASSMAN: Why don't you ask him what  
13 Mr. Floyd said to him.

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14 MR. BENEDICT: Because I want the question  
15 broader than that. He may have found it out  
16 by some other means.

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17 MR. GLASSMAN: You can ask him that.

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19 MR. BENEDICT: I beg your pardon. I am  
20 entitled to conduct this deposition the way I  
21 choose to and I guarantee you, we will have  
22 to call Mr. Mehler back to clarify all the  
23 portions of the record you have confused.

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23 Why don't you let us finish today?

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25 MR. GLASSMAN: Come now, Mr. Benedict,  
26 it's inappropriate to ask this witness what  
27 Mr. Floyd knew. You can ask this witness what

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he heard Mr. Floyd knew or what he told

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Mr. Floyd or what Mr. Floyd told him, but the

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question as phrased is inappropriate.

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MR. BENEDICT: If that is in fact the

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case -- and I disagree with you -- the appropriate

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thing for you to have done -- and I assume that

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you would have known this -- would be to state

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an objection as to form and allow the proceedings

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to continue. Then I take my risks that the

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question will be improper and any answer I

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receive will not be admissible.

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Why don't we proceed in that fashion?

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Why don't you follow the Rules of Civil

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Procedure?

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MR. GLASSMAN: Mr. Benedict, I am astounded.

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After I made my objection, if you had not

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continued this colloquy, what you now say should

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have happened would have happened.

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MR. BENEDICT: Mr. Shapiro, please

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reread and retype the question, here.

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I will press my question.

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(The reporter read the question as requested

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as follows: "Question: Do you know whether

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Mr. Floyd knew that that was the practice at

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lease of you?")

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A I do not know what Mr. Floyd knew.

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(Continued on next page.)

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2 Q Do you know whether Mr. Floyd agreed  
3 with you that the only requirements for logging  
4 were to log test results for excessive leakage which  
5 the shift supervisor had determined to be valid, as  
6 you used that word?

7 A I do not know if Mr. Floyd agreed or didn't  
8 agree.

9 Q Did Mr. Floyd ever speak with you about  
10 the logging of leak rate test results?

11 A Not that I recall.

12 Q At any time until today have you ever  
13 had a conversation with Mr. Floyd about leak rate  
14 test results?

15 A Not that I recall.

16 Q I wasn't limiting my question to the  
17 logging; you recognize that?

18 A No.

19 Q And your answer is the same?

20 A I cannot recall any specific time that Mr.  
21 Floyd and I talked about leak rates.

22 Q When you recall the specific time, do  
23 you recall any conversation you have had with Mr.  
24 Floyd with respect to leak rates?

25 A No, I do not.

Mehler

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Q Did you ever tell Mr. Floyd about any incident in which documentation of leak rate tests was destroyed?

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A Not that I recall.

5

6

Q Did you ever have a conversation in which that subject came up with Mr. Floyd?

7

8

A Not that I recall.

9

10

Q Did you ever have a conversation with anyone on the subject of the destruction or non-logging of leak rate results which indicated leakage in excess of one gallon per minute for unidentified leakage?

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MR. GLASSMAN: Anyone at Met Ed?

15

MR. BENEDICT: Anyone on earth.

16

MR. GLASSMAN: Including counsel?

17

MR. BENEDICT: If the only conversations

18

he had are with counsel, he may exclude that.

19

A I must have talked to the NRC I & C inspectors. You have the tape there.

20

21

Q Other than the interview that you recall being conducted by the NRC in which the issue of leak rates was discussed, can you think of any other conversation before or after the Three Mile Island accident in which you discussed the failure to log

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2 certain leak rate test results which indicated  
3 leakage in excess of one gallon per minute for  
4 unidentified leakage?

5 A I do not recall any discussions with anyone  
6 pertaining to leakage rate other than counsel and  
7 the I & E.

8 Q By I & E, you mean the Inspection &  
9 Enforcement Division of the Nuclear Regulatory  
10 Commission?

11 A Yes.

12 Q Is that right?

13 A Yes, that is correct.

14 Q The question immediately preceding  
15 I had limited to discussions with respect to the  
16 treatment of documentation concerning leak rates and  
17 the tests thereon. Your answer indicated that you  
18 were answering more broadly.

19 Do you recall any conversation you ever  
20 had with anyone excluding counsel and excluding  
21 the I & E interview you recall on the subject of  
22 leak rates above the limits imposed by technical  
23 specifications?

24 A I do not recall discussing leak rates with  
25 any other individuals. I probably have but I do not

Mehler

1  
2 recall.

3 Q Do you recall discussing the allegations  
4 made by Mr. Harold Hartman with anyone other than  
5 counsel and other than the I & E interview that  
6 you recall?

7 A I do not recall other than discussing it with  
8 counsel and the I & E interview any other individual  
9 that I may have discussed it with.

10 Q You don't recall any instance where you  
11 discussed Mr. Hartman and his allegations with  
12 respect to excessive leak rates?

13 A I do not recall any incidents where I discussed  
14 that subject. I am quite sure that I must have  
15 discussed it somewhere.

16 Q You don't recall any conversation,  
17 you cannot identify any individual you might have  
18 talked to on that subject?

19 A No, I cannot.

20 Q Are you aware of any instance where  
21 Unit 2 at Three Mile Island was placed in hot stand-by  
22 or was shut down because of excessive leak rates?

23 A I do not recall any incident on Unit 2 where  
24 Unit 2 was shut down due to excessive leak rates.

25 I do recall one incident on Unit 1 where

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2 we placed Unit 1 in a shutdown condition due to  
3 excessive rates and it wasn't due to running the  
4 leak rate first but it was due to seeing a change  
5 in the make-up tank which prompted the individuals  
6 to run a leak rate which they got excluding the one  
7 unidentifiable and then they proceeded to determine  
8 where it was and this put the plant in a stable  
9 condition and shut it down and we fixed the leak.

10 Q Were you on site and on shift at the  
11 time this occurred?

12 A No, I was not.

13 Q When did this event occur?

14 A The actual time and year I could not determine,  
15 tell you. I just know that it occurred and I do know  
16 where the leak was. It was a check valve leading  
17 into the high pressure line into the -- I believe  
18 it was a cold leg.

19 Q Were you assigned to Unit 1 at the time  
20 of this shutdown, that you recall, as a result of  
21 excess leak rates occurred?

22 A Yes, I was.

23 Q What was your position during that period?

24 A I was a CRO.

25 Q Does that allow you to place an upper time

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2

limit on it? When was the last time you served as a CRO at Unit 1?

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A I can tell you (indicating).

5

Q You are referring to what has been marked as B & W 235?

6

7

A Yes. I served as a CRO on Unit 1 between October 20th, 1969 and August 23rd, 1976.

8

9

Q But you are aware of no instance in which TMI-2 was placed in a reduced level of operation as a result of the determination of any excess leakage?

10

11

12

A None that I recall.

13

14

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Q Are you aware of any instance in which leak rate test results were recorded in a log book or elsewhere incorrectly?

16

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Q Mr. Mehler, are you aware that on March 16th of 1979 or thereabouts, a temporary change notice was issued with respect to the leak rate calculation procedure, a procedure, surveillance procedure 2301-3D1? Were you aware that happened?

20

21

22

A I do not recall being aware of the TCN being issued.

23

24

Q I would like to show you a document that will be marked for identification as Defendants' "

25

1  
2 Exhibit 255 and ask you whether this refreshes your  
3 recollection that a temporary change notice was  
4 issued with respect to the calculational procedure.

5 (Temporary change notice was marked  
6 Defendants' Exhibit 255 for identification,  
7 as of this date.)

8 A No, it does not.

9 Q Did any change occur, to your knowledge,  
10 to the procedure used for calculating excessive  
11 leakage during the period that you served as a  
12 shift supervisor on Unit 2 from April 1st, 1978  
13 to March 28th, 1979?

14 THE WITNESS: Could I hear that question  
15 again, please?

16 (Record read)

17 A None than I recall.

18 Q Was the procedure used for calculating  
19 excessive leakage from the reactor coolant cooling  
20 system incorrect? Did you recognize that that procedure  
21 was at any time prior to the Three Mile Island  
22 accident?

23 A Not that I recall.

24 Q You recall having no concerns about  
25 the accuracy of the procedure that you used or

1

2 supervised the use of with respect to the calculation  
3 of leak rates?

3

4 A I don't recall any concerns.

4

5 Q Do you recall any discussion of changing  
6 the procedure for calculating leak rates during that  
7 period?

7

8 A None that I recall.

8

9 Q And we have established that you do not  
10 recall the temporary change notice that I have shown  
11 you which has been marked as B & W Exhibit 255?

11

12 A No, I do not.

12

13 Q Did you or did your shift under your  
14 supervision perform any leak rate tests between the  
15 period March 16th, 1979 and March 28th, 1979?

15

16 A I wouldn't have the slightest idea if they  
17 did or didn't.

17

18 Q You don't know whether during that 12-day  
19 period your shift, under your supervision, performed  
20 any leak rate tests?

20

21 A I could not say with any certainty that that  
22 occurred because -- between -- on February 16th we shut  
23 Unit 1 down for refueling and there was a period up  
24 until the accident where the supervisors were split  
25 between the units and I could not, without going back

25

1  
2 through the paperwork and all the logs, determine  
3 which particular unit I was on at any particular  
4 date.

5 Q From the date that TMI-1 was shut down  
6 for refueling until the day of the accident at  
7 Unit 2 or March 28th, were you assigned exclusively  
8 to one or the other unit?

9 Do you want to hear the question again?

10 A No. Explain "exclusive," exactly what you mean  
11 by that.

12 Q Did you work at only one of the two  
13 facilities during the period following the shutdown  
14 of the TMI-1 reactor?

15 A No.

16 Q Were there periods during that time  
17 between the shutdown of TMI-1 and the accident on  
18 March 28th when in any one given shift you would  
19 have responsibilities for both units?

20 A Not that I recall.

21 Q During that period do you recall that  
22 you were on any given shift assigned either to  
23 Unit 1 or Unit 2 exclusively? During that shift,  
24 that day, was the practice during that period to  
25 assign you to a single unit?

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A That was the practice during the outage.

Q And that is because when you are refueling they have two shift supervisors on site?

A That is normally the practice.

Q Prior to the Three Mile Island accident on March 28th, 1979, did you have any conversations with any members or any employees of Metropolitan Edison or the GPU companies with respect to the repetition of leak rate tests following the receipt of a leak rate test which indicated leakage in excess of the one gallon per minute maximum allowed for unidentified leakage?

MR. GLASSMAN: Can I have that repeated, please?

(Question read)

A None that I recall.

Q Prior to the accident at Three Mile Island on March 28th, 1979 and during the period that you served as a shift supervisor on Units 1 and 2, did Unit 1 utilize a procedure different than the procedure at Unit 2 for calculating excessive leakage from the reactor coolant system?

A To the best of my recollection, I believe the procedures were almost identical.

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Q You don't recall any differences?

A I cannot recall any differences.

Q Referring to what's been previously marked as B & W Exhibit 255 for identification in the upper right-hand corner there is a printed entry which says, unit number followed by an underlined or an underscored, and written above that is the handwritten numeral 2.

Does that mean that this temporary change notice applied only to the procedure for Unit No. 2?

A That is correct.

Q Are you aware of any changes made to the Unit 1 procedure in the month immediately preceding the Three Mile Island accident?

A No, I am not.

Q Are you aware of any change made to the TMI-1 procedure on calculating excessive leak rates during the period that you served as a shift supervisor?

A None that I recall.

MR. GLASSMAN: Off the record.

(Discussion off the record)

(Recess taken)

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Q Did you ever discuss with anyone changes actual or proposed to the procedure relating to the determination of excessive leakages from the reactor coolant system?

MR. GLASSMAN: Outside of counsel?

MR. BENEDICT: With the exception of counsel.

A Not that I recall.

Q Neither before or after, you cannot recall speaking with anyone other than with counsel on that subject?

A Other than counsel, I don't recall anyone.

Q Are you aware that from about March 22nd, 1979 until the accident on March 28th, 1979, that the reactor coolant system unidentified leakage remained above one gallon per minute at Unit 2?

A Not that I recall.

Q Are you aware that the NRC has made certain allegations with respect to excessive unidentified leakage during that week immediately preceding the Three Mile Island accident?

A Other than with counsel, I did not know about it.

Q You had never heard about it prior to any conversations you had with counsel?

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2 A Not that I recall.

3 Q Are you aware of any actions taken  
4 such as increasing make-up tank pressure or adding  
5 water to the make-up tank, the effect of which was  
6 to create inaccurate or incorrect leak rate test  
7 results?

8 THE WITNESS: Can I heard that again,  
9 please?

10 (Question read)

11 MR. GLASSMAN: The question is corrected  
12 to actions taken rather than the understandings  
13 of allegations through counsel.

14 MR. BENEDICT: I do not want information  
15 that he has obtained solely through counsel.  
16 The mere fact that he discussed it with  
17 counsel, if he has an independent knowledge  
18 of it, I do want to hear about that.

19 MR. GLASSMAN: Of course.

20 A I do not recall knowing of an addition to  
21 the make-up tank or either water or hydrogen during  
22 the leak rate.

23 Q Do you mean during the leak rate testing?

24 A Yes.

25 Q Not limiting myself to those particular

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examples, are you aware of any actions that were taken with respect to the Unit 2 facility, the effect of which would have been to alter it or result in incorrect measurement of the leakage, unidentified leakage from the reactor coolant system?

MR. GLASSMAN: Objection to the form insofar as at least in part it seems to call for hypothetical answers of what the effect would have been, but he may answer if he can.

MR. BENEDICT: Why don't we hear the question again. Maybe I can clear it up if I really said "would have been."

MR. GLASSMAN: Unless I misheard you.

MR. BENEDICT: I may have.

(Question read)

MR. BENEDICT: I will restate the question.

(continued on next page)

2 Q Again, not limiting myself to the two  
3 examples I gave before, were you aware of any actions  
4 taken with respect to the Three Mile Island Unit 2  
5 facility, the effect of which was to cause  
6 inaccurate measurement of reactor coolant leakage  
7 from the reactor coolant system?

8 A I am not aware of -- personally of that ever  
9 occurring.

10 I am aware of the Harold Hartman allegations  
11 that he added water during the leak rate.

12 Q And again "during the leak rate," you mean  
13 during the testing procedure, carrying out the  
14 testing procedure for the leak rates?

15 A Yes.

16 Q Are you aware of any other events or  
17 alleged events other than those you referred to as  
18 being done by Mr. Hartman?

19 A Not that I recall of any other events. I do  
20 not even recall his events.

21 Q When did you first become aware that  
22 Mr. Hartman had taken action with respect to the  
23 Three Mile Island facility, the result of which was  
24 to give incorrect leak rate test results?

25 MR. GLASSMAN: Perhaps I did not hear the

Mehler

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2 witness correctly, and we can have his last  
3 answer read back, but I believe his last answer  
4 said precisely the opposite.

5 Can we have his last answer read back?

6 Q You said you heard that Mr. Hartman had  
7 done some such things, is that correct?

8 MR. GLASSMAN: I would like to have  
9 the last answer read back because I think it said  
10 that he did not even hear or did not even know  
11 about what Mr. Hartman alleged.

12 MR. BENEDICT: As a matter of fact, the  
13 record may say what you say but there is also  
14 an answer preceding that which says that he had  
15 heard of the Hartman -- it's hard for me to  
16 imagine he could know Mr. Hartman's name without  
17 having heard of it some place in the context of  
18 these allegations.

19 MR. GLASSMAN: All we are differentiating  
20 is between allegations and knowledge of what  
21 occurred, and that's all I am trying to keep  
22 clear here.

23 MR. BENEDICT: Why don't we have my  
24 last pending question and if we get an answer to  
25 that, we will move from there.

Mehler

(Record read by the reporter.)

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3 A I believe I previously testified that I heard  
4 Mr. Hartman make allegations that he did so, such  
5 thing. I personally am not aware that it occurred.

6 Q When did you first hear about Mr. Hartman's  
7 alleged acts?

8 A I do not recall the exact time when I heard  
9 that.

10 Q Did you hear it from Mr. Hartman?

11 A No, I did not.

12 Q Did you hear it prior to the Three Mile  
13 Island accident?

14 A No, I did not.

15 Q Did you hear it from one of your fellow  
16 license holders at the Three Mile Island site?

17 A I do not recall who I heard it from.

18 Q You don't recall even whether you heard  
19 it from Met Ed or a GPU employee?

20 A I may have heard it from the I&E people.

21 Q You don't recall that you heard it from a  
22 Met Ed employee?

23 A I do not know who I heard it from.

24 Q Did you ever take actions, the result of  
25 which was to obtain an inaccurate or incorrect leak rate

1  
2 result?

3 MR. GLASSMAN: May I hear that back,  
4 please?

5 (Record read by the reporter.)

6 MR. GLASSMAN: I object to the form.

7 You may answer it if you understand it.

8 A If you are talking about me personally, I can  
9 answer that no.

10 If you are talking about people on my shift,  
11 I did not watch them 24 hours a day, seven days a  
12 week, so I could not answer for them, but to the  
13 best of my knowledge, it never occurred.

14 Q To you personally you never did such  
15 things?

16 A No.

17 Q Did you ever direct that they be done?

18 A No.

19 Q And you are not aware of anyone on your  
20 shift doing them, is that right?

21 A I am not aware of that ever occurring.

22 Q Mr. Mehler, are you aware that there is a  
23 Grand Jury investigation with respect to certain  
24 aspects of the operation of the Three Mile Island  
25 Unit 2 facility?

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A Yes, I am.

Q Have you been called to give testimony before that Grand Jury?

A No, I have not.

Q I am not limiting my question to you actually having given testimony.

Have you been called?

A No, I have not.

Q Do you know of anyone at the Three Mile Island facility who has been called to testify before this Grand Jury?

A Yes, I do.

Q Who is that?

MR. GLASSMAN: Hold on one second.

I would just like to have a brief conference with Mr. Voigt.

(Mr. Glassman conferring with Mr. Voigt off the record.)

MR. GLASSMAN: Objection insofar as it asks for knowledge gained solely in discussions with counsel but the witness can answer it otherwise.

Mr. Mehler, you may answer the question if you obtained such information at any time

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2 independent of counsel. Limit your answer in  
3 that respect.

4 A I do not know where I received the information  
5 of who has testified before the Grand Jury, whether it  
6 was through counsel or whether it was through  
7 general talk.

8 Q Have you ever discussed the Grand Jury  
9 investigation with anyone at Metropolitan Edison?

10 A Other than counsel, no.

11 Q You never discussed it with any licensed  
12 individual employed by Met Ed?

13 A I really don't understand your question.

14 Q What is it that you are puzzled about  
15 my question? Maybe I can help you.

16 A Are you asking me have I discussed it with  
17 people who have testified before the Grand Jury  
18 of what they testified?

19 Q I am asking have you discussed the Grand  
20 Jury investigation with anyone at Metropolitan Edison.

21 MR. GLASSMAN: Or the fact of its existence?

22 MR. BENEDICT: Yes, just where this subject  
23 came up.

24 A I am aware of its existence and so are most of  
25 the people at the Island. I am quite sure in general

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2 conversation it had to materialize. I do not recall  
3 any incidents where I sat down and discussed  
4 it with any individuals.

5 Q You don't recall, during any discussions  
6 you had with respect to the Grand Jury investigation,  
7 anyone identifying any individual employee of  
8 Met Ed who had been called or was going to give  
9 testimony?

10 A I do know of individuals who have given testimony.

11 MR. GLASSMAN: I don't think that's the  
12 question being asked.

13 Can we have it read back, please.

14 (Record read by the reporter.)

15 MR. GLASSMAN: I think the question  
16 related to discussions with individuals.

17 Q In order to satisfy your counsel, I would  
18 like you to, unless Mr. Glassman or your personal  
19 counsel object, answer the next question simply yes or  
20 no.

21 Do you know or have you heard of individuals  
22 employee by Met Ed who have testified or have been  
23 called to testify before the Grand Jury?

24 MR. GLASSMAN: You may answer yes or no.

25 A Yes.

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Q Is it your testimony today that you cannot now distinguish where you learned that information, whether it was solely from counsel, partially from counsel, or not at all from counsel?

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A Yes.

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MR. BENEDICT: Mr. Glassman, I will abandon this particular topic right now.

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I will, however, put an pin in it and note that I will object as non-responsive, his answers, his unwillingness to testify with respect to information where he can't determine the source, and it may be necessary to recall Mr. Mehler or to resolve this difference some other way.

I do not believe this is a satisfactory resolution, and I do not believe that -- although I don't mean to suggest any nefarious reasons, I do not believe that it's a responsive answer to a question to say I can't remember whether I learned that from counsel or whether I learned it elsewhere.

MR. GLASSMAN: I think if you asked him about whether he recalls any particular discussions other than with counsel or the subject

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2 matter, perhaps you will get some information  
3 that might be useful, perhaps you won't.

4 MR. BENEDICT: I believe I already  
5 exhausted that avenue and rather than  
6 belabour the subject, I have made my record,  
7 and I believe it would support me in pressing  
8 for an answer, but I will not at this point  
9 because it will just create a quibble.

10 (Continued on next page.)  
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BY MR. BENEDICT:

Q Other than the NRC investigation or interview which you recall having with respect to the subject of leak rates and estimated critical positions, have you discussed with anyone outside of Metropolitan Edison and excluding your counsel either of those subjects?

A Not that I recall.

Q You recall no other testimony or interviews with respect to the issue of leak rate calculations?

A Not that I recall.

Q Is your answer the same with respect to estimated critical positions?

A None that I recall.

Q Could you explain to me what estimated critical position means?

A It is a procedure -- well, you use a procedure to determine the actual point at which you will achieve criticality when pulling the control rods or it could also occur upon deborated.

Q You mean by reducing the percentage of boron in the reactor coolant fluid?

A Yes.

Q Is there a procedure for approach to

Mehler

1  
2 criticality for the Unit 2 facility?

3 A I could not say for any -- with any certainty  
4 that there is a procedure, but I am quite sure there  
5 is.

6 MR. BENEDICT: I would like to show you a  
7 document that will be marked for identification  
8 as Defendants' Exhibit 256 and ask you whether  
9 this is a copy of a revision of the Three Mile  
10 Island Nuclear Station Unit No. 2 Operating  
11 Procedure 2102-1.2 Approach to Criticality.

12 (Multipage copy of a revision of the "Three  
13 Mile Island Nuclear Station Unit #2 Operating  
14 Procedure 2102-1.2 Approach to Criticality" was  
15 marked B&W Exhibit 256 for identification as of  
16 this date.)

17 A This looks like a Unit 2 approach to criticality  
18 procedure.

19 Q Is this the procedure used or was the  
20 procedure used prior to the accident at Three Mile  
21 Island to bring the Three Mile Island Unit 2 facility  
22 from subcritical to critical operation?

23 A To the best of my recollection, yes.

24 Q Turning to page 4.0 in B&W 256, there is a  
25 heading there which reads: "3.0 Prerequisites."

Mehler

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2 Then, proceeding down the page, there is a  
3 subheading headed as "3.4" which reads "Reactivity  
4 balance calculation (2103-1.9) has been completed and  
5 a critical rod position (0.5%  $\Delta K/K$  above and below  
6 critical position) determined."

7 Did this procedure, prior to the accident,  
8 require that a certain calculation be made with respect  
9 to critical rod position prior to going critical on the  
10 Unit 2 facility?

11 A Yes, that would be the ERP you would be calculating.

12 Q By "ERP," you are referring to estimated  
13 critical position?

14 A That is correct.

15 Q Is it correct that the estimated critical  
16 position is a number calculated prior to taking the  
17 reactor critical which sets forth the expected rod  
18 positions at which the reactor will move into critical  
19 operation?

20 A That is correct.

21 Q What requirements are there with respect to  
22 operation of the Unit 2 facility where criticality is  
23 reached prior or before reaching the estimated critical  
24 position determined pursuant to this or as mentioned in  
25 the prerequisites of this procedure?

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MR. GLASSMAN: You are asking for the witness' knowledge of the current procedures?

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MR. BENEDICT: I am asking with respect to the procedures that were in effect prior to the accident at Three Mile Island.

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A Well, the best that I recall, that you were allowed to have .5 percent delta K per K above or below the critical rod position, so in other words it gave you actually a band that you could achieve criticality within, (indicating) and -- what is the rest of your question?

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Q What happened if you went critical prior to reaching the lower limit of the band you were discussing?

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MR. GLASSMAN: Is this a hypothetical question?

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MR. BENEDICT: No.

18

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Q What did the procedure require, prior to the Three Mile Island accident, with respect to actions that must be taken should you reach criticality prior to reaching the lower end of the band that you were discussing?

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A To insert the rods and achieve a 1 percent shutdown margin.

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Q Is that the same as saying you trip the

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2 reactor?

3 A No, it is not. Trip is when you hit the button  
4 and all the rods fall down.

5 Q You are required to run the rods back in to  
6 a point where the reactor is 1 percent subcritical, is  
7 that what you said?

8 A That's correct.

9 Q Have you, during your time as shift foreman,  
10 or had you, during your time as shift foreman and shift  
11 supervisor on Unit 2, ever performed or supervised the  
12 performance of the estimated critical position  
13 calculation?

14 A Not that I recall.

15 Q Did you, during your tenure as shift foreman  
16 or shift supervisor on the Unit 2 facility, ever take  
17 the reactor from subcritical to critical?

18 A Personally?

19 Q During your shift at the Unit 2 reactor,  
20 did it ever move from subcritical to critical?

21 A I am quite sure I had taken the Unit 2 facility  
22 critical. I do not recall at which particular dates I  
23 did it.

24 Q During any of these movements from subcritical  
25 on which you were on shift, was criticality ever reached

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prior to reaching the band, the permissible one-half percent below the estimated critical position?

A Not to my knowledge.

Q Do you know of any incidents at Unit 2, whether or not you were on shift, when they occurred where the reactor went critical prior to reaching the lower end of the band of estimated critical position?

A Not to my knowledge.

(continued on next page)

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Q Are you aware of any time when at the Unit 2 facility the reactor did not go critical before the rod position exceeded the upper level of the band for examined critical position?

A Not to my knowledge.

Q Under the procedures that existed prior to the accident at Three Mile Island, if that were to occur, did that require the insertion of the control rods to a one percent subcritical margin?

MR. GLASSMAN: I object insofar as there appears to be a hypothetical question regarding a situation which Mr. Mehler just testified he doesn't recall having occurred.

MR. BENEDICT: I would suspect that Mr. Mehler is familiar with a lot of procedures and the requirements thereto at events that he hasn't experienced. I certainly should hope so in light of some of the events that are covered in the procedures.

Mr. Mehler testified earlier that if he -- that the procedure required that the rods be reinserted in the situation where it went critical prior to it reaching the lower end of the band if I asked the question as a leading

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2 question and said isn't it true that the  
3 procedure required if you do not go critical  
4 prior to reaching the top end of this estimated  
5 critical rod or critical position band  
6 that you are required to reinsert the rods to a  
7 one percent subcritical margin.

8 MR. GLASSMAN: I will let him answer this  
9 question. I was not sure on my first hearing  
10 of the question whether you were asking about  
11 his understanding of the procedure or something  
12 else, but he may answer the question.

13 A Yes, you would insert the rods to the lower  
14 end of the ECP which would insure you had at least a  
15 one percent shutdown margin.

16 Q Turning from a Unit 2 to Unit 1, are you  
17 aware of any incidents on Unit 1 at which the  
18 criticality was reached prior to reaching within  
19 the lower end of the band of the estimated critical  
20 position?

21 A I am aware of two incidents in Unit 1.

22 Q When did those incidents occur?

23 A I do not recall the exact date or time. I  
24 just recall the incidents and I was not there when  
25 they occurred. I just remember being told about

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2 Q Do you recall whether these incidents  
3 occurred during the period you served as a shift  
4 supervisor at the TMI facility?

5 A No, they occurred during the period when I was  
6 a CRO in Unit 1.

7 Q Did you receive any formal lecture or  
8 presentation with respect to either of these events?

9 A I do not recall if we did or didn't.

10 Q Do you recall what action was taken in  
11 response to going critical prior to reaching the lower  
12 limit of the estimated critical position?

13 MR. GLASSMAN: What action was taken by  
14 whom?

15 MR. BENEDICT: By whomever, if any action  
16 was taken, with respect to the reactor.

17 MR. GLASSMAN: Does he recall what he  
18 heard or what he knows?

19 MR. BENEDICT: What he has heard is what  
20 he has known --

21 MR. GLASSMAN: But there is a difference  
22 between actual knowledge and hearsay.

23 MR. BENEDICT: He testified he wasn't there  
24 when it happened. I recognize he didn't perceive  
25 these events with his senses, but he may have

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heard what had happened.

MR. GLASSMAN: All right. You may proceed.

A I can only recall what happened on the first event where they achieved criticality during a deboration. At that point they inserted, if I am not mistaken, Group 4 and also started emergency borate.

Q You say that the one of the two instances that you recall was a situation involving deboration.

Do you recall whether the second or other situation incident that occurred at Unit 1 involved rod movement or deboration?

A I believe the second and I was not there so I can only rely on what I was told, the second event occurred upon pulling rods and they achieved criticality prior to reaching the lower end of the ECP.

Q Did you hear or do you know what action was taken by the operators at that time?

A They inserted the rods to insure a shutdown margin.

Q Have you heard of Mr. Hartman's allegations with respect to estimated critical position?

MR. GLASSMAN: Other than through counsel?

MR. BENEDICT: Yes.

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2 A I heard of them through counsel and through  
3 the I&E interview.

4 Q Do you recall any other times that you  
5 heard about Mr. Hartman's allegations?

6 A No, I do not.

7 Q What is your understanding of the Hartman  
8 allegations with respect to estimate critical  
9 position?

10 MR. GLASSMAN: I assume you are excluding  
11 his understanding obtained --

12 MR. BENEDICT: Any information that he  
13 learned from the discussion with counsel I will  
14 exclude.

15 MR. GLASSMAN: But if you have any  
16 independent knowledge or understanding you  
17 may provide that.

18 A I believe during the I&E interview they asked  
19 me basically if we achieved criticality on the low  
20 end and something about hitting a 3 DPM startup rate  
21 and I do not recall that ever occurring.

22 Q What is DPM?

23 A Decades per minutes.

24 Q Do you recall any time that you and Mr.  
25 Hartman served on the same shift and on Unit 2 and

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2 the facility was being taken from subcritical to  
3 critical?

4 A No, I do not.

5 Q Do you recall any such incident on Unit 1  
6 with Mr. Hartman and you on the same shift?

7 A I do not recall Mr. Hartman ever being a CRO in  
8 Unit 1.

9 Q Is it your understanding that Mr. Hartman  
10 is only licensed as a control room operator on Unit 2?

11 A To the best of my knowledge, yes.

12 Q Or was.

13 Are you aware of any incident in which  
14 the estimated critical position was recalculated to  
15 conform with the actual criticality experienced in a  
16 going critical event at either of the Three Mile  
17 Island units?

18 MR. GLASSMAN: Objection to the form.

19 THE WITNESS: Could I hear that again,  
20 please. I don't quite understand what he  
21 said.

22 (Record read.)

23 MR. GLASSMAN: I am not sure I understand the  
24 question but if the witness can he may answer it.

25 A If I understand the question correctly, the

1  
2 answer is no. Not that I know of.

3 Q Is it your understanding that it would  
4 be improper or was improper under the procedures in  
5 effect prior to the accident at Three Mile Island  
6 Unit 2 to recalculate estimated critical position to  
7 conform to the actual critical position reached during  
8 a movement from subcritical to critical?

9 MR. GLASSMAN: Can I hear that again,  
10 please.

11 (Record read.)

12 MR. GLASSMAN: I am going to object  
13 insofar as this question seems to ask for this  
14 witness' understanding now of what would or  
15 would not have been proper under a procedure in a  
16 circumstance that he doesn't recall having  
17 encountered. I think that's improper.

18 MR. BENEDICT: I will stand on my question  
19 and press it.

20 MR. GLASSMAN: I will direct the witness  
21 not to answer.

22 MR. BENEDICT: You are directing the witness  
23 not to answer on what he knows? How can that  
24 be improper for me to ask him what he knows  
25 about the procedures?

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2 MR. GLASSMAN: I think you will find  
3 throughout this litigation you as well as we  
4 have not permitted witnesses to answer questions  
5 now as to their thought of what would have been  
6 or might have been improper under some prior  
7 circumstances --

8 MR. BENEDICT: I disagree with your  
9 recollections categorically, in light of the  
10 events that you have attended fewer depositions  
11 in this case than I have and I think I can  
12 speak assuredly on that subject.

13 I am asking Mr. Mehler simply for his  
14 understanding of these procedures. I did not  
15 ask him a "would" question. I changed the  
16 "would" to did, whether something was in fact  
17 improper under the procedures as he understood  
18 them prior to the accident at Three Mile  
19 Island. I am not asking him to interpret a  
20 document today, I am not asking him a hypothetical  
21 question.

22 I am asking for what understanding he  
23 held with respect to what I proposed.

24 MR. GLASSMAN: You are asking him for his  
25 understanding if he had one back then, in

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other words, putting himself back in time, is that correct?

MR. BENEDICT: I am asking him what his understanding was with respect to the procedures, that's correct.

MR. GLASSMAN: Perhaps you can rephrase it and I will allow him to answer.

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BY MR. BENEDICT:

Q Was it your understanding that the procedures in effect prior to the accident at Three Mile Island made it improper to restate or recalculate the estimated critical position in order to conform with the critical position in fact experienced in a going critical situation?

MR. GLASSMAN: I will still object to the form of the question, the use of the word "improper."

MR. BENEDICT: Fine. I assume you are going to allow him to answer? You have come to your senses, I take it.

MR. GLASSMAN: I have always been with my senses thank God, but the witness may answer if he understands it.

A If I understand the question correctly now, you would not do an ECP after you achieved criticality.

Q It would be improper under the procedures, as you understand them or understood them prior to the accident at Three Mile Island, to change the estimated critical position calculation or the resulting numbers in order to conform to the actual critical position experienced in a movement from subcritical to critical?

MR. GLASSMAN: Objection in terms of the

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2 characterization, what was proper or improper.

3 He can give his understanding of the regulation,  
4 but I think it is inappropriate to characterize it  
5 in that fashion.

6 BY MR. BENEDICT:

7 Q Can you answer the question, Mr. Mehler?

8 A You would not change an ECP to conform with the  
9 actual critical rod height that you had when you  
10 achieved criticality. You could run as many ECP's as  
11 you wanted to.

12 Q Yes.

13 A And sometimes it required doing more than one  
14 because the duration of time between when the first one  
15 was done and when you decided to take the plant critical  
16 and I think -- I better reclarify this or it will come  
17 back to haunt me. There are periods of time after a  
18 refueling of the reactor where you do not know where the  
19 reactor will go critical, and there is a procedure written  
20 to take the reactor critical in deboration to achieve  
21 criticality. At that particular period of time, there is  
22 no ECP developed. I find it very hard to discuss the  
23 broad scope of everything and be so precise.

24 Q You testified that you might do a number of  
25 estimated critical positions. I take it all of those or

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2 whatever number you did, you did them prior to taking  
3 the reactor critical?

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A That is correct.

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Q There were no changes made to any ECP's or  
the analyses or end numbers once the reactor had been  
taken critical?

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A Not to my knowledge.

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Q Did you ever tell anyone to calculate a new  
estimated critical position to conform to the actual  
position of criticality?

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A Not to my knowledge.

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Q Did you ever tell anyone to change any  
estimated critical position calculation in any way after  
the criticality to which it was associated occurred?

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A Not to my knowledge.

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Q With the exception of the conversations you  
have had with your counsel and the interview which  
you have recalled with the NRC representatives, have you  
ever discussed with anyone the subject of recalculation  
or tampering with estimated critical positions after  
the criticality to which those calculations are  
associated was achieved?

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A Not that I recall.

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Q Are you aware of any instance in which

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2 information was withheld, information pertaining to the  
3 accident at Three Mile Island on March 28, 1979 was  
4 withheld from the NRC?

5 A Not to my knowledge.

6 Q Are you aware of any instance where  
7 information with respect to any matter was withheld from  
8 the NRC?

9 A Not to my knowledge.

10 MR. GLASSMAN: Is the question related to  
11 information from Met Ed or GPU?

12 MR. BENEDICT: I think the question and the  
13 answer are both clear.

14 BY MR. BENEDICT:

15 Q Were you ever interviewed or have you ever  
16 given testimony with respect to the question of whether  
17 Met Ed withheld any information from the NRC?

18 A Yes, I am.

19 Q What interviews or testimony do you recall?

20 A I recall one interview that took place at, I  
21 believe it was, at the Howard Johnson's, and I do not  
22 recall what particular time it took place or exactly  
23 who all was present other than my counsel and the NRC.

24 Q Would it refresh your recollection if I told  
25 you that you were present at an interview in Room D-4 of

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the Howard Johnson Motor Inn on September 3, 1980 at which Mr. Harpster, Mr. Craig, Mr. Moseley, Mr. Gamble, and Mr. Hoefling of the NRC were present as well as Mr. McBride, Ms. Penny, and Ms. Boast, the counsel representing you were present?

A No, it wouldn't.

(continued on next page)

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2 Q Do you recall any other testimony that you  
3 gave with respect to the subject of the withholding  
4 of information by Metroplitan Edison with respect to the  
5 Three Mile Island accident?

6 THE WITNESS: Could I hear that again,  
7 please?

8 (Record read by the reporter.)

9 A I do not recall what was discussed in that  
10 testimony.

11 Q Now, you have identified an interview that  
12 you recall occurring at a Howard Johnson's and was it  
13 with representatives of the NRC?

14 A Yes.

15 Q Did you have present counsel representing  
16 you personally?

17 A Yes, I did.

18 Q Do you recall that that interview occurred  
19 sometime in the fall of 1980?

20 A I do not recall exactly when it occurred.

21 Q Do you recall any other interviews, other  
22 than the Howard Johnson interview, with respect to the  
23 subject of withholding information by Metropolitan  
24 Edison?

25 A None that I recall.

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Q Have you ever given any testimony before a grand jury with respect to this subject?

A No, I haven't.

Q Have you ever testified or been called to testify on behalf of a grand jury on any subject whatsoever?

A Not to my knowledge. You know --

Q If it happened you weren't aware of it?

A They didn't identify theirself as the grand jury.

Q I am certain that you would have known you were in front of a grand jury if it happened and you would have remembered it.

MR. BENEDICT: Off the record.

(Discussion off the record.)

(Luncheon recess taken at 1:45 P.M.)

\* \* \*

## A F T E R N O O N            S E S S I O N

(2:00 P.M.)

B R I A N            A .            M E H L E R ,            resumed.

E X A M I N A T I O N (Continued)

B Y M R . B E N E D I C T :

Q            Mr. Mehler, with respect to the NRC interview that you recall concerning leak rates and estimated critical position, were all of the answers and all of the testimony you gave in that interview true?

A            To the best of my -- well, I don't recall the testimony so --

Q            Do you recall testifying truthfully?

A            I always did every time I testified, to the best of my ability all the time.

Q            With respect to the interview or deposition concerning the subject of withholding information by Met Ed from the NRC, did you testify to the best of your ability at that deposition?

A            To the best of my ability, I always testified truthfully at the time.

MR. BENELECT: That is all I have with the exception of the open items concerning some of the documents I requested and some of

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2 the documents that Mr. Mehler turned over to  
3 his private counsel prior to the document  
4 production and then I think there may have been  
5 a couple of open items noted on the record.

6 MR. GLASSMAN: Off the record.

7 (Discussion off the record.)

8 MR. GLASSMAN: We reserve our right to  
9 cross-examine Mr. Mehler at some future time.  
10 I have no questions at the moment.

11 MR. BENEDICT: Well, I object to your  
12 reservation of cross-examination. We arranged  
13 to spend the whole day today as we had the  
14 day's prior, and it is only two o'clock.

15 If you have any cross-examination, I would  
16 certainly prefer to have it concluded now and  
17 will object to any future efforts to make a  
18 record unless it concerns the narrow areas that  
19 we might choose to call Mr. Mehler back for.

20 MR. GLASSMAN: I have stated my position  
21 and reservation, Mr. Mehler has a long drive  
22 home and he has been away for a while and we would  
23 like to see him be able to get back without being  
24 stuck in the rush-hour here today.

25 My statement stands.

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MR. BENEDICT: As does mine, so why don't we conclude.

Do you, as Mr. Mehler's personal counsel, have any cross-examination?

MR. VOIGT: I do not.

MR. BENEDICT: Thank you.

(Time noted: 2:05 P.M.)

BRIAN A. MEHLER

Subscribed and sworn to  
before me this        day  
of                    1981.

Notary Public



July 31, 1981

## I N D E X

WITNESS	PAGE
Brian A. Mehler	565

## E X H I B I T S

B&W	FOR IDENT.
251	Two-page document entitled "Reactor Coolant System Operational Leakage" 571
252	Document which is a Three Mile Island Nuclear Station Unit #2 Surveillance Procedure 2301-3D1 RCS Inventory 576
253	Three Mile Island Nuclear Station Administrative Procedure No. 1012, Shift Relief and Log Entries, Revision No. 3, dated August 11, 1975 585
254	Tape recording 599
255	Temporary change notice 636
256	Multipage copy of a revision of the "Three Mile Island Nuclear Station Unit #2 Operating Procedure 2102-1.2 Approach to Criticality" 654

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