

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

- - - - -x

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

Plaintiffs, :

-against- :

80 Civ. 1683  
(RO)

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

Defendants. :

- - - - -x

Continued deposition of General Public  
Utilities Corporation by RICHARD W. ZECHMAN,  
taken by Defendants, pursuant to adjournment,  
at the offices of Davis Polk & Wardwell, Esqs.,  
One Chase Manhattan Plaza, New York, New York,  
on Thursday, March 11, 1982, at 9:45 o'clock  
in the forenoon, before Robert Capuzelo, a  
Shorthand Reporter and Notary Public within  
and for the State of New York.



WALTER SHAPIRO, C.S.R.  
CHARLES SHAPIRO, C.S.R.

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\* \* \*

1  
2 R I C H A R D W. Z E C H M A N, resumed,  
3 having been previously duly sworn by the  
4 Notary Public, was examined and testified  
5 further as follows:

6 EXAMINATION (Continued)

7 BY MR. FISKE:

8 Q Mr. Zechman, do you realize you continue  
9 to be under oath today?

10 A I do.

11 MR. MacDONALD: Regarding a recent  
12 production of some documents from the training  
13 department, you asked me to inquire as to  
14 where those documents came from, and I spoke  
15 to Rochelle Hanson who I understand was the  
16 individual from our firm who sent the letter  
17 down, and her understanding is those are  
18 general training department documents, and  
19 that is where they came from, culled from the  
20 training department files as a whole, no particular  
21 individual's files.

22 There may be documents in there from many  
23 different individuals, but that is my best  
24 understanding of that box of documents.

25 MR. FISKE: Thank you.

1  
2 Q Mr. Zechman, when we left off yesterday  
3 evening, you were going to look at B&W Exhibit 557  
4 which has been the subject of the questioning near  
5 the end of the afternoon, and let us know, after  
6 reviewing it, whether you wanted to change any of  
7 the answers that you had given concerning whether  
8 specific programs described in this exhibit had  
9 been given during the period of time while you were  
10 in charge of the training department.

11 Have you done that?

12 A I have read the document. One point  
13 of clarification --

14 Q Are there any changes you would like to  
15 make?

16 MR. MacDONALD: I don't think it is  
17 necessarily changes. He may want to amplify.

18 A In reviewing these, the setting with which  
19 these were given were related to the initial  
20 cold license program and program associated with the  
21 initial staffing.

22 After the initial staffing, both the  
23 magnitude -- the context of the training programs  
24 changed from a cold license program to a hot license  
25 training program and may have not included all the

1  
2 same kind of programs each of these did for the  
3 initial staff.

4 There are certain lectures, programs,  
5 that are identified in here that we may still  
6 conduct in our training, but not in the same framework  
7 that these are spelled out.

8 One other point of clarification, and  
9 that has to do with the period with which I was in  
10 charge. I'm assuming it is understood in the  
11 period of 9/78 up to the time of the accident that  
12 my position was in training, and during that  
13 period of time the supervisor of training or acting  
14 supervisor of training, as I should put it, was  
15 shared between Mr. Frank McCormack and Marshal  
16 Beers during that period with full responsibility  
17 and authority.

18 Q You had a position during that period  
19 of supervisor of training, did you not?

20 A I had the title, yes.

21 Q Yesterday, Mr. Zechman, we made some  
22 references to the portion of the Met Ed FSAR which  
23 deals with the training program.

24 I would like -- this is B&W Exhibit  
25 206 -- to hand you that and refer you to a portion

1  
2 which is captioned "Metropolitan Edison Requalification  
3 Program."

4 I believe you testified yesterday that  
5 this program was conducted during the period of time  
6 November 1977 through March '79.

7 MR. MacDONALD: Are you asking whether  
8 that is his testimony or are you --

9 Q That is a fact, is it not, that the  
10 requalification program was going on during that  
11 period of time?

12 A What were the dates?

13 Q November '77 to March '79.

14 A That was the time requalification programs  
15 were going on. There were amendments in that  
16 interval.

17 Q The Met Ed FSAR states that, "The basis  
18 of the requalification program is the need to  
19 maintain operator competence and proficiency in the  
20 quest for continued safe operation."

21 Do you see that?

22 MR. MacDONALD: Section 13.2.2?

23 MR. FISKE: Yes.

24 A I see that.

25 Q Was it your understanding that that was

1  
2 the purpose of the requalification program?

3 A It's my understanding that was the  
4 purpose of the requalification program, yes.

5 Q Is it correct that some time in 1978,  
6 beginning some time in 1978, the control room operators  
7 attended requalification training sessions less  
8 frequently than they had previously because of a  
9 change in the shifts from six to five?

10 A That is not necessarily true. They are  
11 required to spend a minimum of 60 hours per year  
12 in training, minimum. Normally we conducted a  
13 training program that exceeded 60 hours per year.

14 Q Is it a fact that during that period of  
15 time there was a change in the shifts, the number of  
16 shifts?

17 A I don't recall the exact time period, but  
18 there was a period of time they went to five shifts,  
19 that is correct.

20 Q Could you describe just for the record  
21 what the difference was between six shifts and five  
22 shifts, how that worked?

23 A Yes. During six-shift rotation, that  
24 included three working shifts, a relief shift, a  
25 shift that was off and a training shift.

During five-shift rotation, a relief shift, three operating shifts, and an off shift.

Q How long was each shift?

A The relief shift by the way was used for the training shift.

Q How long was each shift?

A Eight hours, working hours.

Q So just so I understand it, if you took under the six-shift program, six consecutive eight-hour working days, three of those would be devoted to working on duty, one being relief, one being off, and one for training, is that correct?

MR. MacDONALD: Are you asking how the program operated, exactly as you describe it?

MR. FISKE: Yes.

Q Is that the concept?

A I'm not sure that you have described that correctly.

Q Why don't you describe it then?

A Fine.

A typical week, there would be a group that works from 7:00 until 11:00, 11:00 to 7:00 -- correct that.

7:00 to 4:00, 4:00 to 11:00, 11:00 to

1  
2 7:00. There would be one shift that would be  
3 off and there would be one shift that would be  
4 working daylight hours from 7:00 to 4:00. It's that  
5 shift that would be in training during normal shift  
6 rotation.

7 So I would see, every five weeks, I would  
8 see the relief -- each relief shift.

9 Q When you say there are six shifts, then  
10 you are referring to two consecutive 24-hour days or  
11 six shifts?

12 A Six shifts means during the daylight hours  
13 there would be a relief shift on duty and at the  
14 same time there would be a daylight crew called the  
15 training crew, training shift.

16 Q How was that different when there were  
17 five shifts?

18 A The difference is that instead of the  
19 relief shift being down for training, it would be the  
20 sixth shift for training.

21 Q I don't think this is coming across very  
22 clearly.

23 Could you try again.

24 A Yes.

25 When there are six shifts, there are six

1  
2 bodies of individuals as opposed to when there are  
3 five shifts, there are five bodies of individuals.

4 During six-shift rotation, one of the  
5 shifts is a training shift.

6 During the five-shift rotation, it's the  
7 relief shift that becomes the training shift.

8 We utilized or trained the people who are normally  
9 assigned to relief.

10 Q Is it your testimony then that the  
11 change from six shifts to five shifts as you have  
12 just described it had no impact on the amount of  
13 training that the operators received?

14 A It is my testimony that we conducted a  
15 requalification program in accordance to the  
16 prescribed, required requalification and met the  
17 requirement to the best of my recollection for that  
18 training program.

19 Q I guess my question -- that wasn't my  
20 question.

21 My question was, is it your testimony  
22 that the change from six shifts to five shifts had  
23 no impact on the amount of requalification training  
24 that a given operator received?

25 A I have no recollection that I have made

1  
2 a balance between -- or recall a balance that I  
3 personally made between the amount of training for  
4 six shifts and the amount of training for five  
5 shifts.

6 I can only state that we certainly  
7 conducted a minimum of 60 hours requalification  
8 program as required.

9 MR. FISKE: Could you read that answer  
10 back, please.

11 (Record read back.)

12 Q Did there come to your attention in  
13 1978 that there was a problem with attendance in the  
14 requalification program?

15 A Yes, I recall a period of time that we  
16 had attendance to the live lectures in the  
17 requalification program that required us through  
18 the mode of the requalification program to prepare  
19 separate materials, we called them care packages, to  
20 the individuals, or make-up packages.

21 Q Let me show you a document which was  
22 marked as B&W Exhibit 303.

23 Do you have that in front of you?

24 A Yes, I do.

25 Q That is a memorandum written by Mr. Goodman.

1

2 A It is not.

3 Q Pardon me?

4 A Not ~~the~~ one I have in front of me.

5 Q Is this it?

6 A Exhibit 303 is before me at this time,  
7 yes.

8 Q That is a memorandum dated June 21,  
9 1978, correct?

10 A That is correct.

11 Q That is from Mr. Goodman?

12 A Yes.

13 Q Subject: "Unit 1, 2, Requalification  
14 Program Attendance," right?

15 A Yes, sir.

16 Q And you received a copy of that?

17 MR. MacDONALD: Does he recall receiving  
18 a copy?

19 Q You did receive a copy, did you not?

20 A I can't recall either way at this time  
21 whether I received it. I was aware of the problem  
22 at that time. I can't recall any more whether I looked  
23 at this particular piece of paper.

24 Q Do you recall learning in or about June  
25 21, 1978 that after the first week of the five-week

1

2

3

4

requalification training program cycle had been completed, that there was an overall attendance of only 44 percent for licensed personnel?

5

6

A I no longer recollect any numbers of that sort.

7

8

Q You referred a moment ago to make-up packages.

9

10

11

A Yes.

Q I guess they have been called care packages, have they not, from time to time?

12

13

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24

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A Yes.

Q I take it, is it correct, what happened if someone missed a classroom lecture, then the instructor made up what is referred to as a care package for that individual then to study in his own time to get the information that he missed in class?

A That is correct.

Q What would one of those care packages typically consist of?

A Typically it would consist of any hand-out material that was utilized. Sometimes it would include a lesson plan, the appropriate lesson material that was taught in that period, and maybe a quiz.

1  
2 Q And this was to, in effect, substitute  
3 for what the individual had missed by not being at  
4 the class?

5 A This was a way for that individual to  
6 make up what he missed in class.

7 Q Mr. Goodman states in this memorandum,  
8 Exhibit 303, "Make-up packages are a poor  
9 substitute for live instruction."

10 Do you see that?

11 Where are you at?

12 Q Item No. 2 down at the bottom.

13 A I see that statement.

14 Q At the time you received this memorandum,  
15 did you express any disagreement with that concept?

16 A As I told you a few minutes ago, I recollect  
17 having an attendance problem in some period of time.  
18 I don't recollect today this piece of paper.

19 If I don't recollect this piece of paper  
20 at this time, I can't recollect what I said at that  
21 time.

22 Q Did you ever express the view to anybody  
23 that you disagreed with the notion that make-up  
24 packages are a poor substitute for live instruction?

25 MR. MacDONALD: He just told you he didn't

1  
2 necessarily recall whether he ever heard that.

3 Q To put it this way, Mr. Zechman, did you  
4 agree with the concept it was better to have the  
5 people in class learning the information directly in  
6 class than having to get it from a care package  
7 afterwards?

8 A It is my opinion that I certainly would  
9 rather have an individual in class for live  
10 instruction, but I also would clarify there has been  
11 no evidence that giving the care packages has  
12 diluted any of the training we tried to convey during  
13 our requalification program.

14 Q I think, Mr. Zechman, that is a question  
15 that the court will have to decide when it hears  
16 the facts in this case.

17 MR. MacDONALD: I think it is part and  
18 parcel of his answer.

19 You asked something on this subject  
20 matter and he gave you what his answer is.

21 MR. FISKE: It is a major issue in this  
22 case whether the training program was adequate  
23 and whether or not one of the problems with  
24 the training program was that people were  
25 not going to class and, therefore, missing

1  
2 the benefits of live classroom instruction.

3 MR. MacDONALD: You asked for his  
4 understanding and his understanding he gave  
5 you on the record.

6 I think there is a full statement on the  
7 record of what his understanding was.

8 MR. FISKE: I asked whether he simply  
9 thought it was better for them to be in the  
10 class rather than reading the material, and  
11 he answered that question and then added  
12 something to it to which I responded.

13 Q Mr. Zechman, let's go to the other  
14 exhibit I think that I handed you previously by  
15 mistake which is B&W Exhibit 304.

16 Do you have that in front of you?

17 A I have Exhibit 304 in front of me.

18 Q That is a memorandum, is it not, from  
19 Mr. Beers to a group of people listed at the  
20 top of the page, again on the subject of Unit 1, 2,  
21 requalification program attendance, this time dated  
22 September 3, 1978.

23 A It says September 1 on mine.

24 Q September 1, 1978, is that correct?

25 MR. MacDONALD: Are you asking if that

1  
2 is what the document says?

3 MR. FISKE: Yes.

4 A That is what the document says.

5 Q The document indicates you received a  
6 carbon copy, does it not?

7 A The document says the secretary had a carbon  
8 copy supposedly to me.

9 Q The copy that you have underlined, in  
10 front of you, does it contain underlining?

11 A There are underlinings on the copy that  
12 I have, yes, sir.

13 Q Is one of the underlinings under your  
14 name?

15 A Yes.

16 Q Is there also underlining under the  
17 sentence that says, "Overall, approximately half the  
18 licensed people are not attending equal. training"?

19 A In the copy that I have, that is underlined.

20 Q Did you put that underlining on there,  
21 Mr. Zechman?

22 A Not to the best of my recollection.

23 Q Did you put the underlining under your  
24 name?

25 A Not to the best of my recollection.

1  
2 Q Did you understand when you received a  
3 copy of this, that somebody had underlined your name  
4 because they wanted you to pay special attention  
5 to the material that was underlined in the memo?

6 MR. MacDONALD: Objection. You asked  
7 whether or not he recalls receiving the document.  
8 You asked whether he appears as a cc on the  
9 document.

10 MR. FISKE: I think Mr. Zechman is  
11 perfectly capable of telling us if he wants  
12 to now he doesn't recall ever receiving this  
13 memo. If he wants to tell us he doesn't  
14 recall receiving either one of the two memos,  
15 saying that less than half the people were  
16 attending the requal. program, he can say that.

17 MR. MacDONALD: He may have no recollection  
18 one way or the other.

19 MR. FISKE: Let's find out.

20 MR. MacDONALD: Why not ask him the  
21 question instead of making an assumption?

22 MR. FISKE: I did.

23 MR. MacDONALD: You assumed in your  
24 question that he recalled receiving it.

25 MR. FISKE: I said when he received it.

1  
2 I think it's a fair assumption he  
3 received it when it is produced by Met Ed and  
4 it shows a carbon copy was sent to him.

5 MR. MacDONALD: You can assume anything  
6 you want.

7 Ask the witness a question. We are  
8 not here to learn about your assumptions.

9 MR. FISKE: Read the question.

10 (Record read back.)

11 A In that question, you assume I got a  
12 copy and recollect that copy.

13 I will state that I was aware that there  
14 was an attendance problem. I don't recollect either  
15 way this particular document at this time.

16 Q So your testimony is that you now say  
17 you don't recall receiving either -- you don't  
18 recall whether or not you received either Exhibit  
19 303 or 304?

20 A I'm saying at this point in time,  
21 considering that was in 1978, I have seen so many  
22 documents during that period of time, that I don't  
23 recollect one way or the other whether I saw this  
24 one at that time.

25 Q And that answer applies, you say, to both

Exhibits 303 and 304?

A Yes, sir.

Q You are not denying, are you, during this period of time when you were in charge of the training program at Med Ed that you were aware that less than half the licensed people were attending the requalification classes?

A I don't recall the percentage of people who did not attend the class. I cannot confirm your number at this time.

I only can confirm that I was aware there was an attendance program. That I will confirm.

Q Did you do anything about this attendance problem, Mr. Zechman?

A Yes, sir, I did.

Q Did you bring this question of the poor attendance by the licensed operators at training programs to the attention of management?

A I certainly did.

Q Isn't it a fact that nothing was done about it in terms of improving attendance?

A That would have to be time qualified. There was a period of time that we were aware of the attendance problems. There was a period of time

1  
2 in which I made senior management and operations  
3 management aware of the attendance problems and  
4 there was a period of time it improved.

5 Q It certainly hadn't improved by the  
6 time you ceased functioning as head of the training  
7 department, had it?

8 A I don't recall the period, exact period  
9 when it did improve.

10 Q There is a memorandum dated September 1,  
11 '78.

12 Isn't that just about the day you became  
13 supervisor of the training department and  
14 began to devote eight hours a day to your own personal  
15 study?

16 A That is correct.

17 Q As of that time when you ceased to function  
18 actively as a supervisor of the training department,  
19 the attendance had not improved, had it?

20 MR. MacDONALD: Are you asking for his  
21 recollection?

22 MR. FISKE: Yes.

23 A My recollection is not -- I told you  
24 before, you are quoting from this letter, and I told  
25 you I didn't recollect either way the time period of

1  
2 this letter and, therefore, I still have not a  
3 clear recollection in my mind of the period of time  
4 that we had the problem and when the problem  
5 cleared.

6 Q Well, you cannot tell us as you sit here  
7 today that this attendance had improved in any  
8 significant way as of the time you assumed the  
9 position of supervisor of training, can you?

10 A Sir, I can only repeat that I'm aware  
11 there was an attendance problem and it was in and  
12 around that period of time, but I can't nail it down  
13 to a fixed time at this time.

14 Q Isn't it a fact, Mr. Zechman, that the  
15 attendance continued to decline right up to the time  
16 of the accident?

17 A As I just testified a few minutes ago,  
18 I said I was aware of the attendance problem.  
19 I was also aware the attendance problem improved at  
20 some point in time, but I don't recall when.

21 Q And you can't tell us now whether that  
22 was before the accident or after the accident, is  
23 that correct?

24 A It's been too long ago. I have no  
25 recollection at this time.

1  
2 Q So the answer is you can't say one way  
3 or the other as you sit here today?

4 A That is correct.

5 Q You were interviewed by Mr. Keaten I  
6 think as you told us previously at some point after  
7 the accident, is that correct?

8 A That is correct.

9 Q In that same interview, present were  
10 Mr. Beers and Mr. McCormack.

11 You testified to that before, or a part  
12 of the time?

13 A Yes, part of the time.

14 Q Isn't it a fact at that meeting that  
15 Mr. Keaten was told that attendance at training  
16 sessions has been very poor and declining?

17 A I recall at that meeting that one of the  
18 subject areas which was discussed was attendance,  
19 but I don't recall with what framework that was  
20 discussed, whether it was discussed in past periods,  
21 present periods. I just don't recall.

22 Q Let me show you a document which we will  
23 mark as the next exhibit, B&W 561.

24 I would just like to read from this  
25 document to you, Mr. Zechman, and then ask you a

question.

MR. MacDONALD: Can he read through it before you ask a question?

MR. FISKE: By all means.

(Copy of a document entitled "TMI-2 Investigation Task Force Interviews, 10/16/79" marked B&W Exhibit 561 for identification as of this date.)

Q Have you finished reading that exhibit?

A There were some things I couldn't make out.

Q I know, Mr. Zechman, you have been writing some notes on a yellow pad in front of you.

A Yes.

MR. FISKE: Could we have that marked as the next B&W exhibit please.

MR. MacDONALD: Sure.

(Notes made by the witness on a yellow pad marked B&W Exhibit 562 for identification as of this date.)

Q Looking at the handwritten memorandum that you have just been reading, Exhibit 516, after reading that, does that in any way refresh your recollection on any subject that you discussed with Mr. Keaten back in October of '79? Just yes or no.

1  
2 MR. MacDONALD: Let him answer the  
3 question.

4 MR. FISKE: All I want to find out --

5 A There are selected items in there that  
6 I recall discussing.

7 Q Let me direct your attention, Mr. Zechman,  
8 to what I believe is the seventh line on the first  
9 page, and I would just like to read a few sentences,  
10 and if you, as I read it, think I am reading it  
11 incorrectly, you let me know because I recognize it  
12 is somebody's handwriting.

13 It says, "Attendance at training sessions  
14 has been very poor and declining. For example, in  
15 1978, the attendance record was about 30 percent.  
16 This was attributable to the inability of the OPS  
17 department to release their people for the required  
18 training. Off-shift people were the worse in  
19 attendance. Shift supervisors were not as bad, but  
20 were worse than that of the control room operators  
21 themselves and the auxiliary operators, et cetera.

22 "This attendance was brought to the  
23 attention of the plant management on a number of  
24 occasions. The response to these letters was not  
25 at all apparent as attendance continued to go down."

1  
2 Do you see those portions of the notes  
3 that I just read?

4 A Yes.

5 Q Did you or Mr. Beers or Mr. McCormack  
6 make statements to that effect to Mr. Keaten at the  
7 interview that you had with him in October of '79?

8 A I can only testify to what I recall saying  
9 to them and I do recall discussing attendance.  
10 I don't recall discussing it specifically as it is  
11 written here.

12 I do recall discussing the attendance  
13 problem.

14 Q Is it your position that you told Mr. Keaten  
15 in October of 1979 that at some point before the  
16 accident, attendance had started to increase?

17 MR. MacDONALD: Are you asking whether he  
18 recalls telling Keaten that?

19 MR. FISKE: Yes.

20 A I don't recall either way.

21 Q In reading this memorandum, you do not  
22 see any statement to that effect in the memorandum,  
23 do you?

24 MR. MacDONALD: You mean of the portions  
25 he can make out?

1  
2 MR. FISKE: Yes.

3 MR. MacDONALD: It is not a transcription.

4 A In the notes, it looks like it was  
5 centering around the period 1978.

6 Q I guess we can draw our own conclusions  
7 from what I just read as to whether the reference to  
8 the fact that attendance continued to go down after  
9 the 30 percent figure was brought to the attention  
10 of management in 1978 means that this memorandum  
11 refers to a condition existing after 1978.

12 MR. MacDONALD: Draw any conclusion you  
13 want.

14 Q My question specifically, Mr. Zechman,  
15 is is it fair to say there is no statement that  
16 you see in this memorandum in front of you to the  
17 effect that at some point, at any point before the  
18 accident, attendance improved?

19 A Not in this document.

20 Q Let me show you a document which has  
21 been marked as Exhibit 558. It is three pages of  
22 handwritten notes which I regret to inform you are  
23 even more difficult to read than those in 561 because  
24 of the microfilming, but I would represent to you  
25 those have been identified as notes that Mr. Keaten

1  
2 made of the interview that we have just been  
3 discussing.

4 I will give you this copy, Mr. Zechman,  
5 that I have.

6 Have you seen that document before?

7 A You have given me three documents.

8 Q It is all one document.

9 A It's my recollection that I have not  
10 seen this document.

11 Q You should probably take a minute to look  
12 at it.

13 A I read it, but I regret to say that a lot  
14 of it I couldn't read.

15 Q I will be asking you specific questions  
16 about specific portions of it. As I do that, you  
17 will have another chance to look at the particular  
18 section I am asking about.

19 Could you look at the last section of  
20 the first page.

21 Do you see the number there? Could you  
22 just read that off the notes?

23 A Starting off with "1978"?

24 Q Yes. What does it say after that?

25 A "3" -- something. I would be guessing

1  
2 that it is a zero and a percent sign, "attendance."

3 Q Did you see anything in these notes that  
4 referred to any increase in attendance at any time  
5 from 1978 through to the date of the accident?

6 MR. MacDONALD: He just told you he couldn't  
7 read them. The document speaks for itself.

8 You may ask him present-sense impression  
9 of what is in the document, but the words are  
10 what they are.

11 MR. FISKE: I am asking him -- do you  
12 object to that question?

13 MR. MacDONALD: I object to the question.

14 MR. FISKE: I think I will agree with you  
15 on this particular occasion that the document  
16 speaks for itself, containing no such reference.

17 Q Mr. Zechman, there is --

18 MR. MacDONALD: That is not what I said.

19 MR. FISKE: I invite you to disagree with  
20 me if you think I am wrong.

21 MR. MacDONALD: I can't read all the  
22 document, either.

23 Q The next sentence after "1978 - 30 percent  
24 attendance" says, "Missing, requires care packages  
25 written by instructor." Then the next line, as I

1  
2 read it, says, "Required 2500 packages/year."

3 Do you see those two?

4 A I don't recollect the first word.  
5 I recollect "Requires care packages written by  
6 instructor." I recognize "required" -- something,  
7 "2500," and it looks like "packages/year."

8 Q It is a fact, isn't it, that a very  
9 considerable number of care packages had to be  
10 prepared because of the low attendance and the necessity  
11 to prepare such packages for the people that were  
12 not coming to class?

13 A I recall that there was a number of  
14 care packages. I no longer recall the magnitude of  
15 those.

16 Q If these notes were to be construed as  
17 indicating that you or Mr. Beers or Mr. McCormack  
18 had told Mr. Keaten that that number was as high as  
19 2500 packages per year, would you --

20 MR. MacDONALD: I object. That is purely  
21 hypothetical.

22 You may ask what he recalls, but you can't  
23 ask if he said this, what would that mean.

24 Q Isn't it a fact that at the interview  
25 with Mr. Keaten, it was stated by you or Mr. Beers

1  
2 or Mr. McCormack that the number of care packages  
3 was 2500 per year?

4 A I recall at that meeting indicating that  
5 there was a large number of care packages.

6 If I were to give out a number, if I were  
7 to give out a number at that time, it would have  
8 been pure speculation. I don't recall that number.

9 Q Based on your present recollection as  
10 you sit here today, are you prepared to say that  
11 number was wrong?

12 A I have no recollection --

13 MR. MacDONALD: Objection.

14 Go ahead.

15 He told you he doesn't recall the  
16 numbers.

17 Q You are not in a position then to tell  
18 us that the number of care packages that had to be  
19 prepared per year was significantly less than 2500?

20 MR. MacDONALD: Objection. He told you  
21 his recollection.

22 A I don't recall the specific number.

23 Q You certainly recall it was well up in  
24 the hundreds?

25 A I don't recall the number any more.

1  
2 Q You have no recollection at all?

3 A I recollect that there was a number of  
4 them. I don't recollect the magnitude of them any  
5 more.

6 Q Would you agree with Nelson Brown  
7 that the preparation of these care packages was a  
8 very time-consuming process?

9 MR. MacDONALD: You are asking him now  
10 for his recollection some time in 1978, whether  
11 he can recall whether the preparation of those  
12 care packages in 1978 was a time-consuming  
13 process?

14 MR. FISKE: 1978 or '79. Right up to --

15 MR. MacDONALD: I am just asking for what  
16 your question is intending to do.

17 MR. FISKE: I am not talking about the  
18 number.

19 Q What I am asking you now, thinking back  
20 to that time period, the number of care packages  
21 that had to be prepared and what had to go into each  
22 care package as you have previously described that  
23 process, would you agree with Nelson Brown that the  
24 preparation of these care packages was a "very  
25 time-consuming process"?

1  
2 MR. MacDONALD: Objection to the form  
3 of the question.

4 Do you want to ask what his recollection  
5 is and whether or not it was a time-consuming  
6 process? You may ask that question.

7 The form of your question I think is objectionable.

8 Q Is it fair to say that the preparation  
9 of these care packages, taking into account both  
10 the numbers that had to be prepared and what had  
11 to go into each package, was a very time-consuming  
12 process?

13 MR. MacDONALD: What Mr. Brown may have  
14 interpreted as time-consuming, I don't know  
15 what he meant, you don't know what he meant.  
16 Surely Mr. Zechman wasn't there talking to him,  
17 so he doesn't know.

18 If you want to ask apart from that --

19 MR. FISKE: At the moment, I am asking  
20 apart from Mr. Brown. I am asking it apart  
21 from Mr. Brown.

22 Q Just your own recollection of that  
23 whole situation, the number of packages that had to  
24 be prepared and what had to go into each package.

25 Is it fair to say that was a very

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time-consuming process?

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A I testify that the time it takes to prepare a care package is directly related to the subject matter, the depth of the subject matter, and the amount of material to be covered during that period of time.

Therefore, some care packages would take a lot less time than others. It varies from care package to care package.

Q I recognize there might be that variation across the whole number that had to be prepared right up to 2500.

I am just saying, taking into account what went into each package, coupled with the total number of packages that had to be prepared, isn't it fair to say that that whole process was very time-consuming?

A You quoted a number of 2500. I don't agree with that number.

Q I said whatever it was up to 2500.

MR. MacDONALD: Whatever your recollection is, Mr. Zechman.

A It is recognizable that the number of care packages we had at the time when attendance was

low, was time-consuming and required us to do extra work.

Q Isn't it also true that in addition to sending out the material, it was necessary to track it to follow that the individual did, in fact, receive it?

A That was part of the normal job with the requalification programs, to track any care packages that were sent out. That was a rather easy task, though, because that was done with a matrix.

Q Just so I understand it, the burden of preparing these care packages fell on the people who were conducting the classroom sessions, is that correct?

A I don't know that I would call it a burden. It's their responsibility to prepare those care packages.

Q Whatever time was devoted to preparing those care packages was devoted by the people who were conducting the classroom sessions, isn't that correct?

A That is correct.

Q And those were the people that held the

position of administrator/technical training as it has been described; so-called instructors?

A Yes, sir. There are times when the group supervisors may have participated.

Q It would either be the group supervisors or the instructors?

A That is correct.

May we take a break?

Q Sure.

(Recess taken.)

MR. FISKE: Read back the last question and answer, please.

(Record read back.)

BY MR. FISKE:

Q Directing your attention, Mr. Zechman, again to the document that has been marked as B&W 358, which are Mr. Keaten's notes of the interview, I am showing you the second page, the third item, which, as I read it, says, "No club to enforce attendance except licensing exam."

Do you see that?

A I see that.

Q Isn't it a fact that before the Three Mile Island accident, you felt that there was no club

1  
2 to enforce attendance except the licensing exam?

3 A Are you asking me if that is my quote?

4 MR. MacDONALD: That is basically what  
5 he is asking you, whether you recall saying that.

6 Q That you held that view.

7 A I held a view prior to the accident  
8 that it was the responsibility of the line function  
9 in this case, line function operations department,  
10 to have their people attend training.

11 Q As far as the people who were supposed  
12 to attend the training were concerned, there was no  
13 club to get them to go to the training except the  
14 licensing exam?

15 MR. MacDONALD: I object to the form of  
16 the question. He gave his answer.

17 I also think that you have not attributed  
18 that statement to him. What somebody may have  
19 said or wrote on the pages is their  
20 interpretation of what was said --

21 MR. FISKE: It is a preliminary question.

22 Q Isn't it a fact that was a view that you  
23 held?

24 A That is not a fact.

25 Q Isn't it a fact that you made a statement

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to that effect to Mr. Keaten during this interview?

MR. MacDONALD: By "you" you mean Mr.

Zechman?

MR. FISKE: Yes.

A I have no recollection of making a statement in that format.

I do recall making, to the best of my recollection, a statement that it's the responsibility of the line function to get the people there.

Q The question is, what can they do about it if the people don't go? You understand what we are talking about.

MR. MacDONALD: He gave you his recollection twice as to the question that you have asked.

Do you have another question?

MR. FISKE: Yes. It is the same question. I don't believe it has been answered.

Q Did you tell Mr. Keaten during this interview that there was no club to enforce the attendance other than the licensing program?

MR. MacDONALD: Objection. If you would like -- and I know you are not trying to prolong this deposition -- he just told you two questions and answers ago that he didn't

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recall ever making that. What he recalled in that subject areas was what he testified to.

3

4

Q Is that correct, Mr. Zechman, what your counsel just said?

5

6

A That is correct.

7

8

Q I will read you from a question and answer at Mr. Keaten's deposition. I will be happy to come over there since I'm sure you don't have copies over there.

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Reading from page 705 of Mr. Keaten's deposition, the question is, "Would you look at the next page of your handwritten notes. I recognize it is a very poor copy. Unfortunately, this is the best we can do working from the microfilm that we had.

17

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19

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"Looking at the third comment down from the top of the page, the one that begins and reads 'No club to enforce attendance except licensing exam,' do you see that?

21

22

23

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25

"Answer: I think that is what it says.

"Question: Did members of the training

staff complain that before the accident they had no way to enforce attendance at training sessions other than the threat of possible failure of the licensing

1  
2 exam?

3 "Answer: I believe that I recollect that  
4 a comment as to that regard was made. I don't  
5 remember specifically whether it was a complaint or  
6 simply a comment.

7 "Question: Do you know who made the  
8 comment, Mr. Zechman or Mr. Beers?

9 "Answer: I believe, to the best of my  
10 recollection, it was made by Mr. Zechman."

11 Hearing those questions and those answers  
12 from Mr. Keaten's testimony, does that refresh your  
13 recollection that you made such a statement to  
14 Mr. Keaten?

15 MR. MacDONALD: I object to the form of  
16 the question. He wasn't there when Keaten was  
17 deposed and he doesn't know what was meant.  
18 You don't have to look incredulously across the  
19 table.

20 MR. FISKE: I think I am asking an entirely  
21 reasonable question. Having heard Mr. Keaten's  
22 testimony that to the best of his recollection  
23 Mr. Zechman made the statement that we have  
24 been talking about, I am simply asking whether  
25 that helps Mr. Zechman remember that, in fact,

1  
2 he did make that statement.

3 A I stick to my previous testimony.

4 Q Isn't it a fact, Mr. Zechman, that even  
5 after the Three Mile Island accident, attendance  
6 at training sessions continued to be poor?

7 MR. MacDONALD: I object to the form of  
8 the question.

9 I think he has testified previously that  
10 he has some recollection at some point in time  
11 and you are using the term "continued" and I  
12 don't think that is proper based on what the  
13 testimony has been.

14 MR. FISKE: We have yet to identify that  
15 time.

16 Q Isn't it a fact that as late as  
17 December of 1979, more than six months after the  
18 Three Mile Island accident, attendance at training  
19 sessions continued to be poor at Met Ed?

20 MR. MacDONALD: I object to the form of  
21 the question.

22 Q You may answer.

23 THE WITNESS: Would you repeat that question  
24 for me, please.

25 (Record read back.)

1  
2 A I'm sorry, I have no recollection of  
3 magnitude of attendance at that period of time.

4 Q You don't have any recollection that  
5 classroom attendance in the requalification program  
6 reached an all-time low in the period November of  
7 '79 through December '79?

8 A I'm just stating right today I don't  
9 recollect the time frames, the attendance time  
10 frames. That is all I'm saying.

11 Q Your answer to my last question is you  
12 don't remember?

13 A I don't remember today.

14 MR. FISKE: Let's mark the next exhibit  
15 B&W Exhibit 563.

16 (Copy of a memorandum dated 12/20/79  
17 from Mr. Zechman to L. L. Lawyer marked  
18 B&W Exhibit No. 563 for identification as of  
19 this date.)

20 Q Have you had a chance to look at B&W  
21 Exhibit 563?

22 A I have.

23 Q That is dated 12/20/79, is it not?

24 A That is correct.

25 Q Subject: "Unit 2 Requalification

Attendance"?

A That is correct.

Q Is that your signature at the bottom,  
"R. W. Zechman, Supervisor of Training"?

A That is not my signature, and he had  
authority to sign my signature to that letter.  
I drafted the letter; he signed it.

Q If I understand you, this document has  
just been identified as a document that you drafted  
and Mr. Frederick put your signature to, with your  
authority?

A That is correct.

Q Was this a memorandum that you wrote in  
the regular course -- that you prepared in the regular  
course of business as supervisor of training?

A Can you repeat that?

Q Was this written as part of your job?  
Was this done in the course of your duties?

A In accordance with my duties to make  
these kinds of things, yes.

MR. FISKE: Mark this as the next exhibit.

(Copy of a memorandum from James P.  
O'Hanlon marked B&W Exhibit No. 564 for  
identification as of this date.)

1  
2 Q Do you still have Exhibit 563 in front  
3 of you?

4 A Yes, I do.

5 Q The first sentence refers, does it not,  
6 to a report prepared for you by Mr. Frederick  
7 concerning attendance at the Unit 2 requalification  
8 program for the period of November 5, '79 through  
9 December 14, '79?

10 A That is correct.

11 Q The next sentence says, "The results  
12 of this survey indicated an all-time low in classroom  
13 attendance for this short period of a little over  
14 one month."

15 Do you see that?

16 A I see that.

17 Q Did you underline the word "low" in that  
18 sentence, or did Mr. Frederick?

19 A To the best of my recollection, I wrote  
20 the letter and I underlined it.

21 Q Two sentences later it says, "Because  
22 of the poor attendance, Ed Frederick had to prepare  
23 332 'care packages' to be sent out for make-up and to  
24 be tracked."

25 Do you see that sentence?

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A I do.

3

Q Was the procedure for preparing care packages after the Three Mile Island accident essentially as it had been before in terms of what went into them and how it was done?

6

A Yes.

7

Q In the next paragraph there is a reference to two gentlemen named Joe Chwastyk and Bernie Smith, who, it is stated, did not attend a single lecture out of 20 given.

10

Do you see that reference?

12

A Yes, I do.

13

Q Who is Mr. Chwastyk?

14

A He was a shift supervisor, Unit 2.

15

Q And Mr. Smith?

16

A Shift supervisor, Unit 2.

17

Q And the next sentence after that says, "Even though hunting season and vacations may have interfered, no attempt to make up the lecture during relief week or any other time was made."

19

Does that sentence refer back to Mr. Chwastyk and Mr. Smith?

22

A To the best of my recollection, it did.

23

Q This memorandum is written to Mr. L. L.

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2

Lawyer, is that correct?

3

A That is correct.

4

Q What was his position?

5

A Acting manager of training.

6

Q The last sentence says, or next to last,

7

"I believe we have reached the point where the 'clout'

8

of senior management personnel such as yourself is

9

required to proclaim the mandatory requirement

10

for operations personnel to attend the requalification

11

lectures and to impress upon them their responsibility

12

to meet the requirements of their license."

13

Do you see that?

14

A Yes, I do.

15

Q Mr. Lawyer was part of senior management

16

personnel?

17

A Yes, he was.

18

Q Did he have the position comparable

19

to the position that Mr. Tsaggaris held in 1978?

20

A No.

21

Q Was there a position in existence in

22

1978 comparable to the position Mr. Lawyer held in

23

December of '79?

24

A One position, that was Tsaggaris', was

25

a director. Mr. Lawyer's position was acting manager.

1  
2 By title they are not the same. By  
3 authority, I don't know how to compare them, to be  
4 honest.

5 Q Well, trying to compare the two positions  
6 as they existed, did you feel in '79 that  
7 Mr. Lawyer had more "clout" than Mr. Tsaggaris held  
8 in 1978?

9 MR. MacDONALD: You are asking if he has  
10 a recollection of making that comparison  
11 in or around the time he wrote the memorandum?

12 MR. FISKE: No, I am asking him to make it  
13 now.

14 MR. MacDONALD: I am going to object to  
15 that. Ask him what he recollects at this time.

16 A Do I answer?

17 Q Yes.

18 MR. MacDONALD: I object to a present-sense  
19 impression sitting here today as an opinion.  
20 I don't think you allowed your witnesses to  
21 answer those types of questions.

22 If you want to ask in or around this  
23 time period -- as a matter of fact, I think I  
24 will instruct him not to answer.

25 Q This memo in December of 1979 wasn't the

1  
2 first time that you had thought of invoking the "clout"  
3 of higher authority in order to try to induce people  
4 to attend training sessions, was it?

5 MR. MacDONALD: Whether this was the first  
6 time he can recall using the term "clout"?

7 MR. FISKE: No, that is a colloquial term.  
8 You can equate it with any other noun that  
9 occurs to you. In other words, the very simple  
10 point is that this time frame in December of  
11 '79 was not the first time it had ever occurred  
12 to him that he should try to take the problem  
13 of poor attendance to higher management to try  
14 to get an improvement in the situation.

15 A To the best of my recollection, this  
16 isn't the only time that I have done that.

17 Q Is it still your testimony that you  
18 don't recall anyone saying to Mr. Keaten in October  
19 of '79 that prior to the Three Mile Island accident,  
20 the problem of poor attendance was brought to the  
21 attention of the plant management on a number of  
22 occasions and the response to those letters was not  
23 at all apparent as attendance continued to go down?

24 MR. MacDONALD: I think you have asked  
25 him that question and he gave you the answer.

1  
2 MR. FISKE: I am asking him is that still  
3 his recollection, in light of the memorandum  
4 that I have just shown him in December of '79.

5 THE WITNESS: Read it back.

6 (Record read back.)

7 MR. MacDONALD: My objection stands.

8 A My only recollection still stands, what  
9 I have testified to before, that I made him aware  
10 of the attendance problem.

11 Q The memo that you have in front of you,  
12 B&W Exhibit 563, that you prepared, do you see it?  
13 Do you have it in front of you, the December 20, '79  
14 memo?

15 A Yes.

16 Q Do you see the reference to the word  
17 "clout" in the paragraph I read just a minute ago?

18 A Yes, I do.

19 Q That is in the memo written by you,  
20 is that right?

21 A That is in the memo written by me.

22 Q You have put "clout" in quotes.

23 A And I put "clout" in quotes.

24 Q Let me read from the Exhibit 561  
25 which are the handwritten notes of the meeting you

1  
2 had with Mr. Keaten on October 18, 1979.

3           Immediately following -- let me read  
4 two sentences in sequence. "This attendance was  
5 brought to the attention of the plant management  
6 on a number of occasions. The response to those  
7 letters was not at all apparent as attendance  
8 continued to go down. Even with the training  
9 department reporting back to Redding for separation  
10 purposes, et cetera, they did not seem to get any  
11 clout to force the OPS department to improve  
12 attendance."

13           I will ask you whether or not you made  
14 that statement to Mr. Keaten.

15           MR. MacDONALD: You have asked it three  
16 times and he has told you his best recollection.

17           MR. FISKE: I am referring to the sentence  
18 that I have read for the first time which I will  
19 read now, the one with the word "clout" in it.

20           It reads, from the notes of the meeting  
21 with Mr. Keaten, "Even with the training  
22 department reporting back to Redding for  
23 separation purposes, et cetera, they did not  
24 seem to get any clout to force the OPS  
25 department to improve attendance."

1  
2 Q Having seen your memo where you used  
3 the word "clout" in quotes, does that refresh your  
4 recollection that you were the source of the  
5 information in the sentence I just read from Exhibit  
6 561?

7 MR. MacDONALD: I object. I don't know  
8 whether that was ever even said at the time  
9 of an interview.

10 MR. FISKE: You can object.

11 MR. MacDONALD: I have just stated my  
12 objection.

13 Q You may answer.

14 A I have no recollection of the choice of  
15 my words at that time.

16 MR. FISKE: I think I previously marked  
17 as Exhibit 564 a document that I have yet  
18 shown the witness and I will do that now.

19 This is a document, a handwritten note,  
20 four pages.

21 Q Do you have that in front of you?

22 A Yes.

23 Q You may want to take a moment to read  
24 that.

25 A I have read it.

1  
2 Q That contains a memorandum to Mr. O'Hanlon,  
3 handwritten memorandum to Mr. O'Hanlon from Mr. T. L.  
4 Book, does it not, with a covering memo from Mr. O'Hanlon  
5 to Mr. G. R. Miller, Mr. Tsaggaris, Mr. Goodman,  
6 yourself, and Mr. Kunder, is that correct?

7 A Yes.

8 Q Can you tell us, looking at the first  
9 page, what the date is of Mr. O'Hanlon's memo?

10 A It looks like -- it's not clear.

11 Q Some time in 1977 in any event?

12 MR. MacDONALD: The document says what  
13 it says. You can read as well as he can.

14 Ask the person who wrote it.

15 MR. FISKE: I think I can talk to the  
16 person who received it as well.

17 Q You did get a copy of this, didn't you,  
18 Mr. Zechman?

19 A I recall getting a copy of this.

20 Q Some time in or about June of 1977?

21 A That's what the letter says. I don't  
22 recollect, myself, whether it was that period of time.

23 Q Well, this certainly came to your  
24 attention some time in 1977, did it not?

25 MR. MacDONALD: He told you what he

1  
2 recalls.

3 MR. FISKE: I am seeing if we can include  
4 the entire year 1977 in his recollection.

5 A I recall receiving this document.  
6 I don't recall specifically when I got it.

7 Q In 1977 did you know an individual by the  
8 name of T. L. Book?

9 A Yes, I did.

10 Q What was his position in June of 1977?

11 A I don't recall what his specific position  
12 was at that time, mainly because I think he had a  
13 promotion somewhere in that time frame.

14 Q What was Mr. O'Hanlon's position at that  
15 time in June of '77?

16 A I have no recollection what his specific  
17 title was at that time.

18 Q I would like to direct your attention  
19 to the third paragraph of the memo to Mr. O'Hanlon  
20 which reads, "Like all else, the S/F and S/G's have  
21 become the Godhead of 60 hours required training per  
22 year."

23 Do you understand what S/F and S/G's  
24 referred to?

25 MR. MacDONALD: You want to know what he

1  
2 understood when he received the memo?

3 MR. FISKE: Yes.

4 Q When you received the memo, did you  
5 understand what an S/F and S/G was?

6 A I understood S/F. I don't know what is  
7 S/G.

8 Q Maybe it is an S/S.  
9 Did you understand this to refer to  
10 shift foremen and shift supervisors?

11 A Yes, I did.

12 Let me correct this. I understand the  
13 S/F was shift foreman.

14 I don't know what the second thing is.

15 If you are implying -- I don't recall  
16 what that was.

17 Q Did you understand it when you received  
18 the memo?

19 MR. MacDONALD: That is what he is  
20 testifying to.

21 Q Are you saying right now you don't know  
22 one way or the other whether you understood what  
23 Mr. Book was talking about?

24 MR. MacDONALD: I don't think that was  
25 the question. You asked specifically whether

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he had a recollection of what those two marks were when he received the memo.

3

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Q Is it your testimony, Mr. Zechman, that you didn't understand what Mr. Book meant by a S/S when you received this memo?

5

6

7

A I don't know that we clearly identified that as S/S. It's not clear to me at this time looking at that.

8

9

10

Q Is it your testimony that you didn't understand what Mr. Book meant by the initials which appear at the end of that particular line at the time you received this memo?

11

12

13

14

A Are you asking what my assumption in that period would have been?

15

16

MR. MacDONALD: Not. Your assumption.

17

18

What you recall at that time, what you knew about that particular mark.

19

20

21

You don't want him to speculate on what he assumed he might have thought on that particular mark.

22

23

24

Q Any way you can. If you can't, we will go on to the next question.

25

A To the best of my recollection, I

1  
2 understood what he meant.

3 Q By that he meant shift supervisors, didn't  
4 he?

5 A To the best of my recollection.

6 Q Let me read the whole paragraph and  
7 then ask you whether I am correct in my understanding  
8 of the sense of this paragraph, as you understood it  
9 at the time you received it.

10 "Like all else, the shift foremen and  
11 shift supervisors have become the Godhead of 60 hours  
12 required training per year. It's time to put training  
13 back in the training department where it belongs and,  
14 in a responsible fashion. This means more training  
15 space, people and expertise. This also means six  
16 shifts for CROs, shift foremen and shift supervisors."

17 Did you understand when you received this  
18 memo that Mr. Book's basic complaint was that too  
19 much of the 60 hours required training per year was  
20 being done under the shift foremen and shift supervisors  
21 who were operations people rather than in the training  
22 department?

23 MR. Mac DONALD: Are you asking basically  
24 what he understood when he read that paragraph  
25 after receiving the memo?

1  
2 MR. FISKE: I am asking if he had the  
3 understanding that I just read.

4 MR. MacDONALD: What he understood when  
5 he read the paragraph.

6 MR. FISKE: Read the question back.

7 As I see it, it is simple.

8 MR. MacDONALD: I think you are putting  
9 words in Mr. Book's mouth that Mr. Book may or  
10 may not have intended by writing the paragraph.

11 The easy question is what he understood  
12 when he read the paragraph.

13 MR. FISKE: I will put the question the  
14 way I want to. I think I am entitled to ask  
15 whether he drew the conclusion from this  
16 whole paragraph that I just expressed.

17 MR. MacDONALD: I am going to object.

18 MR. FISKE: Read the question again, please.

19 (Record read back.)

20 A I understood this as one man's opinion  
21 who was upset at the time, expressing his own opinion.

22 Q Yes, I understand. But that he was  
23 expressing the opinion which I just asked you about  
24 in the last question.

25 MR. MacDONALD: My objection still stands.

1  
2 Q He was expressing the opinion that he  
3 felt more of the 60 hours per year required  
4 training should be done in the training department,  
5 isn't that right?

6 MR. MacDONALD: I object.

7 What your recollection was at the time.

8 A My recollection is exactly what he wrote  
9 here. I have no idea what was in his mind at any  
10 time, but whatever he said here is what he said.

11 Q Well, did you understand when he said it  
12 is time to put training back in the training department  
13 where it belongs and in a responsible fashion, that  
14 he thought that the 60 hours required training should  
15 be done by the training department?

16 MR. MacDONALD: Are you asking him to  
17 interpret what was in Mr. Book's mind when he  
18 wrote the memo?

19 MR. FISKE: Conclusions he drew from this  
20 memo when he received it, sure.

21 MR. MacDONALD: I object.

22 THE WITNESS: Read the question.

23 (Record read back.)

24 MR. MacDONALD: I object.

25 If you recall anything about what was

1  
2 said --

3 MR. FISKE: No.

4 MR. MacDONALD: You are asking him to  
5 get into someone's mind.

6 MR. FISKE: No.

7 MR. MacDONALD: You are using your  
8 words to say what Mr. Book thought and then  
9 whether or not Mr. Zechman recalls those  
10 thoughts. If you want to ask Mr. Zechman what  
11 he recalls of his understanding when he read  
12 that paragraph, go right ahead.

13 MR. FISKE: No. 1, Mr. MacDonald, you know,  
14 I believe by now in a deposition like this I am  
15 entitled to ask leading questions.

16 Mr. Zechman was favored by Mr. O'Hanlon  
17 with a copy of this memo along with such  
18 luminaries as Mr. Miller and Mr. Tsaggaris and  
19 Mr. Goodman, and I assume, for the purpose of  
20 my question, that he read this memo at the time  
21 and tried to deal with it appropriately.

22 MR. MacDONALD: You can assume whatever  
23 you want.

24 MR. FISKE: I am simply asking him  
25 whether, when he read this paragraph, he believed

1  
2 that Mr. Book's concern, among others, was not  
3 enough of the 60 hours required training per  
4 year was being done in the training department.

5 A I believe that he was very confused at  
6 the time and upset and was not very rational in his  
7 memo.

8 Q And you reached that conclusion without  
9 knowing what it was Mr. Book was trying to convey to  
10 you?

11 A What Mr. Book conveyed to me is right what  
12 is written here. No more, no less.

13 MR. MacDONALD: He told you that three  
14 times, Mr. Fiske.

15 Q Mr. Zechman, we had some questions  
16 earlier about difficulties in the effectiveness of  
17 the training when there was a six-shift as opposed  
18 to five-shift program.

19 Do you remember that?

20 A Yes, I do.

21 Q Looking at this memo dated June 7, 1977,  
22 in light of the last sentence on page 1, does that  
23 refresh your recollection that by the time of this  
24 memo, that is, June 1977, the switch had been made  
25 from six shifts to five?

1  
2 THE WITNESS: Read that question.

3 (Record read back.)

4 A All this reflects in my mind is a statement  
5 made by Ted Book. I still don't have a time frame  
6 when that shift was made, in my mind.

7 Q Did you understand when you received this  
8 memo that it was Mr. Book's view that in order to  
9 put the required 60 hours required training per year  
10 back in the training department, it would require six  
11 shifts for the CRO's shift foremen and shift  
12 supervisors?

13 A This is not sinking in. I would like  
14 to take a break after this.

15 THE WITNESS: Read it back, please.

16 (Record read back.)

17 A I had no idea what he had in mind or how  
18 he related those two just by the receipt of this memo.

19 Q Did you ask him what he meant by it?

20 A I have no recollection.

21 Q You have no recollection of trying to find  
22 out what he meant?

23 A I have no recollection either way.

24 Q Do you see the word written in handwriting  
25 on the left-hand side of the page right next to

1  
2 the -- right at the very bottom of page 1?

3 A What is your page 1? Are you talking  
4 about the cover sheet?

5 Q The bottom of page 1 of Mr. Book's  
6 memo says, "This means more training space, people and  
7 expertise. This also means six shifts for CROs,  
8 S/Fs and S/Ss." In the left-hand margin is written a  
9 word.

10 Do you see that word?

11 A I see a word.

12 Q Can you read it?

13 A Not really.

14 Q Doesn't it say "True"?

15 MR. MacDONALD: He just said he can't read  
16 it.

17 A I said it was not clear.

18 Q Do you recognize the handwriting in that  
19 marginal notation?

20 A No, I don't.

21 Q It's not your handwriting?

22 A It's not my handwriting.

23 Q Is that Mr. O'Hanlon's writing?

24 A I just indicated I don't know whose  
25 writing that is.

1  
2 THE WITNESS: Can we take a break,  
3 please?

4 MR. FISKE: Sure.

5 (Recess taken.)

6 MR. FISKE: Could you read the last question  
7 and answer.

8 (Record read back.)

9 BY MR. FISKE:

10 Q Directing your attention to the next  
11 page, Mr. Zechman, the second paragraph, let me  
12 read it into the record so we can ask you some  
13 questions on it.

14 It reads, "Besides being just plain  
15 frustrated over all of this, it is my opinion that  
16 it is somewhat erroneous to say we have fulfilled the  
17 NRC requirements when they are based on documentation  
18 of subject matter supposedly covered on shift," and  
19 it looks to me as though the "supposedly" may be  
20 underlined. "Many times more hours are documented  
21 than were actually used for training."

22 Do you see that paragraph?

23 A I see that paragraph.

24 Q Was there a procedure at Met Ed during  
25 this period of time and continuing on through the time

1  
2 that you were in charge of the training department  
3 to document the amount of time that was spent on  
4 training?

5 A There was an administrative document in  
6 which we recorded the hours of training and the  
7 personnel in attendance.

8 Q For this period, this program that  
9 you described as requiring 60 hours of training per  
10 year, was it necessary that at the end of the year,  
11 the records reflect that each individual had, in  
12 fact, had 60 hours?

13 THE WITNESS: Read that back.

14 (Record read back.)

15 A It would reflect the amount of time of  
16 training they had during that year.

17 Q If the records didn't reflect 60 hours  
18 for an individual, then the records would reflect a  
19 deficiency in the program for that individual?

20 A Yes, it would.

21 Q Did that documentation requirement  
22 apply to subject matter that was covered on shift?

23 A I just drew a blank on the 60-hour  
24 requirement interpretation.

25 Q Did you understand that the Nuclear

1  
2 Regulatory Commission had regulatory authority over  
3 the training that was being conducted at Met Ed?

4 A Would you like to expand upon that, please.

5 Q What is unclear about it?

6 A Your interpretation of regulatory authority  
7 over the training program.

8 Q Did you understand that in order for Met  
9 Ed to keep its operating license, it had to conduct  
10 a training program that was satisfactory to the  
11 Nuclear Regulatory Commission?

12 A I understood that.

13 Q Did you understand that part of what was  
14 necessary to satisfy the Nuclear Regulatory Commission  
15 was to conduct a requisite number of hours of training?

16 A I understood it, that it was our requirement  
17 to meet the requirements of our requalification program.

18 Q Which includes a specified numbers of  
19 hours of training, does it not?

20 A Yes, it does.

21 Q Did you understand that the documentation  
22 of the training that was given served to demonstrate,  
23 if necessary, to the Nuclear Regulatory Commission  
24 that the requisite number of hours of training were,  
25 in fact, being conducted?

1

2

A I understood that.

3

Q Did you understand that it would be

4

wrong to create documents which showed the training

5

had been done when, in fact, the training had not

6

been done?

7

A I understood that.

8

Q Directing your attention to the last

9

sentence of the second paragraph of Mr. Book's

10

memorandum which reads, "Many times more hours were

11

documented than were actually used for training."

12

Do you see that?

13

A I see that.

14

Q Did you understand when you received

15

this memorandum that Mr. Book was stating that

16

documentation had been created which falsely

17

reflected the amount of training which had been done?

18

MR. MacDONALD: I object to that.

19

A I don't understand what was in Mr. Book's

20

mind at that time.

21

Q Well, was it important -- go ahead.

22

A When I read this document, including that

23

paragraph, it was very obvious to me there was a

24

very upset individual making a lot of rash statements

25

and not being very rational about what he was saying.

1  
2 Q Well, when you read this sentence in  
3 which he said "Many times more hours were documented  
4 than were actually used for training," did you  
5 understand what he meant by that sentence?

6 MR. MacDONALD: He just told you what his  
7 understanding was.

8 MR. FISKE: No, he didn't.

9 MR. MacDONALD: You can interpret it any  
10 way you want.

11 MR. FISKE: I want an answer to that  
12 question.

13 MR. MacDONALD: I think the witness --

14 MR. FISKE: He can either say he understood  
15 it or not.

16 MR. MacDONALD: He is going to give an  
17 answer to the question if he hasn't already.

18 A I will repeat the same answer I gave you  
19 a few minutes ago, sir.

20 When reading this letter, it was obvious  
21 that we had an upset individual who was not being  
22 very rational about what he was saying.

23 Q You have just said that you felt he was  
24 not being rational about what he was saying, correct?  
25 That is what you just said in your last answer? Isn't

1  
2 that right?

3 Do you want your last answer read back?

4 A No.

5 Q Your last answer just said you felt that  
6 he was not being rational in what he was saying.

7 A In many of the things he was saying, he  
8 was not being rational.

9 Q So in order to draw the conclusion that  
10 he was not being rational, you would have to  
11 understand what it was that he was saying, isn't that  
12 correct?

13 MR. MacDONALD: Understand what he said  
14 in the paper?

15 Q "Many times more hours were documented  
16 than were actually used for training."

17 MR. MacDONALD: He told you what his  
18 understanding was.

19 MR. FISKE: Read the question back  
20 if Mr. Zechman is having trouble with it.

21 (Record read back.)

22 MR. MacDONALD: I am going to object.

23 Q You may answer.

24 A He was saying things that were not  
25 substantiated by fact.

1  
2 Q Did you personally conduct an  
3 investigation to determine whether more hours were  
4 being documented than were actually used for  
5 training?

6 A Sir, in this period of time, if this is  
7 indeed the period of time with which this was  
8 received, I was group supervisor, to the best of  
9 my recollection, I was group supervisor of unlicensed  
10 training. That would not have been in my charge.

11 Q So the answer to that is that you did  
12 not conduct such an investigation?

13 A Not to the best of my recollection.

14 Q Did you ask Mr. Book what the basis was  
15 for this statement in his letter?

16 A Not to the best of my recollection.

17 Q Did you find out from Mr. O'Hanlon,  
18 Mr. Miller, Mr. Tsaggaris, Mr. Goodman, or Mr. Kunder  
19 whether any of them had spoken to Mr. Book in order  
20 to determine what the basis was for his allegation?

21 THE WITNESS: Repeat that question.

22 (Record read back.)

23 A Not to the best of my recollection.

24 Q Do you know as a fact whether Mr. O'Hanlon,  
25 Mr. Miller, Mr. Tsaggaris, Mr. Goodman, or Mr. Kunder

1  
2 conducted an investigation to determine whether more  
3 hours were being documented than were actually used  
4 for training?

5 MR. MacDONALD: What do you mean?

6 A full-scale investigation?

7 MR. FISKE: I will let the question stand.

8 Mr. MacDONALD: Fine. I object.

9 A I have no recollection what they did with  
10 that information.

11 Q As you sit here today, Mr. Zechman, you  
12 were not aware of any effort that was made to  
13 determine factually whether the statement made by  
14 Mr. Book that "Many times more hours were documented  
15 than were actually used for training" was, in fact,  
16 true?

17 MR. MacDONALD: He just told you the answer  
18 to the question. He didn't recall.

19 A I said I don't recall.

20 Q Then I take it you have no basis as you  
21 sit here for saying this was an irrational statement?

22 A You asked me for my opinion when I read  
23 this.

24 MR. MacDONALD: He gave it to you.

25 A I said he gave no specifics in his document.

1

2

He made an accusation of some sort, no specifics.

3

4

5

Q You did nothing to follow it up and you don't know of anything anybody else did, is that correct?

6

7

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MR. MacDONALD: I object. That is not

what he said.

A That is not what I said. I said at that period of time, my recollection, if it is correct, I was a group supervisor in charge of unlicensed training. That would not have been in my charge at that time.

Q You don't know as you sit here today of anything anybody else did?

A I already answered that.

Q You said, by the way, Mr. Book was promoted at or about the time he wrote this memo, is that correct?

A I said I was uncertain about that.

Q Does Met Ed promote irrational people?

MR. MacDONALD: Objection. There is no basis for that question.

MR. FISKE: He can answer it?

MR. MacDONALD: I will instruct him not to answer. He is not necessarily involved

1  
2 in whether Book is involved in a promotion,  
3 whether he should or shouldn't have gotten  
4 a promotion.

5 If you want to ask about his recollection  
6 about people that worked for him who were  
7 promoted, that is fine.

8 Q Are you familiar with the criteria for  
9 promotion at Met Ed?

10 MR. MacDONALD: People within his own  
11 department who he may have been involved with?

12 MR. FISKE: Yes, within the training  
13 department.

14 A With which I was involved, I certainly  
15 have an understanding.

16 Q Did you understand there were different  
17 criteria as far as rationality was concerned in  
18 other parts of the training department other than  
19 the part you were in?

20 A Sir, I would have no part in evaluating  
21 the rationality or determining the rationality of an  
22 individual.

23 MR. FISKE: Let me mark as the next  
24 exhibit, B&W Exhibit 565, a memorandum  
25 dated September 17, 1979 from Mr. Zechman to

1  
2 Mr. L. L. Lawyer.

3 (Memorandum dated September 17, 1979  
4 from Mr. Zechman to Mr. L. L. Lawyer, marked  
5 B&W Exhibit No. 565 for identification as  
6 of this date.)

7 Q I will show it to you and give you an  
8 opportunity to read it.

9 Maybe I can save a little time by  
10 stating to you that you are obviously welcome to  
11 read the entire memorandum, but the only questions  
12 I am going to ask you about it are on page 1.

13 MR. MacDONALD: I think it would be  
14 helpful that you not necessarily read every  
15 word but that you familiarize yourself with  
16 the document.

17 Q If my suggestion means that you read  
18 page 1 a little more carefully, that is perfectly  
19 all right, too.

20 Have you had a chance to read it all now?

21 A Yes. I have not read the detail of the  
22 last full pages.

23 Q This is a memorandum that you wrote to  
24 Mr. Lawyer in September of 1979?

25 A It is.

1  
2 Q I would like to direct your attention to  
3 the second paragraph, the second sentence, which  
4 reads, "It has always been my contention that the  
5 only way to have an effective training program" -- sorry.

6 "It has always been my contention that  
7 the only way an effective training program can be  
8 carried out is to have the sufficient staff and the  
9 necessary time to prepare the material."

10 Do you see that?

11 A I see that.

12 Q That is a sentence that you wrote,  
13 is that correct?

14 A I wrote in reference to the time period  
15 in which this letter was written.

16 Q And the word "effective" is underlined.

17 Did you underline it?

18 A I did.

19 Q It was your view in September 1979, was  
20 it not, that the only way an effective training  
21 program could be carried out is to have the sufficient  
22 staff and the necessary time to prepare the material?

23 A It was my view, putting this letter into  
24 perspective at this point in time, that there  
25 were a lot of programs going on at this time, new

ones, for example, like radiation protection personnel training for the people who were coming in.

Since a number of these programs was increasing, I was making it clear that additional staff would be needed to do this.

Q I am really not at the moment going to ask a lot of questions about the details of the September 1979 training program.

I am simply interested in the concept that you expressed in this sentence that the only way an effective training program can be carried out is to have the sufficient staff and the necessary time to prepare the material.

Do you understand that is what I am asking about?

MR. MacDONALD: He told you his understanding.

Q It is fair to say, isn't it, Mr. Zechman, that before the accident, as well as after the accident, you felt that you could not have an effective training program unless you had sufficient staff?

THE WITNESS: Repeat that.

(Record read back.)

1  
2 MR. MacDONALD: Effective in the way he  
3 used it in the memo and just explained it  
4 as to the new program?

5 MR. FISKE: Come on, Mr. MacDonald.

6 A His point is well taken, sir.

7 This letter was written at a point in  
8 time when the staff -- when the programs were expanding  
9 and so was the staff.

10 Q Mr. Zechman, did it suddenly occur to you  
11 for the first time after the accident that you  
12 couldn't run a good training program unless you had  
13 enough people to do it right? I simply am asking  
14 about the basic concept, not about the particular program  
15 or the particular numbers. Just the basic concept  
16 that in order to run a good program, you have to have  
17 enough people.

18 Is that an idea that first occurred to  
19 you after the accident?

20 A No. I always felt that way and felt that  
21 we did have that.

22 Q We will get to that in a minute.

23 But this sentence indeed says, doesn't it,  
24 "It always has been my contention that the only way  
25 an effective training program can be carried out is

1  
2 to have the sufficient staff and the necessary time  
3 to prepare the material"? Is that correct; that is  
4 what the sentence says, is it not?

5 MR. MacDONALD: The document says what  
6 it says. We don't need the witness to confirm  
7 the written words.

8 A What I wrote is what I wrote.

9 Q Have I read it incorrectly?

10 A You have not read it incorrectly.

11 Q Isn't it a fact, Mr. Zechman, that in the  
12 memorandum that Mr. Book wrote to Mr. O'Hanlon in  
13 1977 he expressed the view that in order to get  
14 the 60 hours required training per year back into  
15 the training department, it would require more training  
16 people, among other things?

17 I refer you to Exhibit 564, the bottom  
18 of page 1.

19 MR. MacDONALD: What is the question.

20 (Record read back.)

21 MR. MacDONALD: Are you asking -- I think  
22 he told you what his understanding was at the  
23 time he read the document. You are not  
24 asking for him to confirm as he sits here now  
25 what is written on a page here? I don't think

1

2

it says that.

3

4

5

Q You understand that Mr. Book was telling you that he felt there should be more training people in the training department?

6

7

A What is said in the letter is what is said in the letter.

8

9

Q I am asking you what you understood it to mean at that time.

10

11

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A What it says in the letter.

Q What is that?

A His opinion.

Q That you needed more training people in the training department, isn't that correct?

A Whatever he said.

Q I am asking you, Mr. Zechman, for your understanding of it.

MR. MacDONALD: What he recalls his understanding was at the time.

MR. FISKE: Right.

A I understood that is what he was saying.

Q Directing your attention to the document that is B&W Exhibit 561, a handwritten document which is in front of you, do you see that?

A Yes.

1  
2 Q It reads at the top, "TMI-2 Investigative  
3 Task Force Interview, TMI, 10/18/79."

4 On the left, "0930, Training, Dick Johnson,  
5 Marsh Beers, Frank McCormick."

6 On the right, "Bob Keaten, Ed Wallace,  
7 Bob Long, Rob Williams."

8 Do you see the first sentence in the  
9 memorandum of that interview, Mr. Zechman?

10 A Ending "Training department staff"?

11 Q Yes.

12 A I see that first sentence.

13 Q Could you read that into the record,  
14 please?

15 A The first sentence reads, "Greatest  
16 burden seen by the training department" -- I don't  
17 know what that is.

18 Q "MGRS."

19 A I don't know.

20 -- "has been the limit on the size of  
21 the training department" -- and it looks like the  
22 word -- "staff."

23 Q Isn't it a fact that at that interview  
24 with Mr. Keaten and Mr. Wallace and the other people  
25 on the task force, you or Mr. Beers or Mr. McCormick

1  
2 made a statement that you have just read into the  
3 record?

4 A It is true that we discussed the size  
5 of the staff and requesting additional staff, but  
6 it was put into a particular context, as I recall,  
7 that is not expressed here.

8 Q You mean you have a specific recollection  
9 of putting that statement in the context that was  
10 not written down by the people on the task force?

11 MR. MacDONALD: I object. He didn't say  
12 that he recollected a statement. He said they  
13 discussed the subject matter. Not that anybody  
14 stated that that was so.

15 A In the recollection of what I expressed  
16 at that time, it was put in a framework that isn't  
17 expressed by somebody's notes here.

18 Q Is it your testimony, Mr. Zechman, that  
19 at no time up to the Three Mile Island accident,  
20 did you ever hold a view that you would like to have  
21 had more people in the training department?

22 THE WITNESS: Read that back, please.

23 (Record read back.)

24 MR. MacDONALD: I object. I don't think  
25 that is what he testified.

1  
2 MR. FISKE: I am asking him.

3 A I have expressed that view in the past.

4 I said my view was that our training  
5 department has worked very hard. We had to work  
6 overtime hours at times. It would have been helpful  
7 to have additional persons so that we did not have  
8 to work additional hours and as hard as we did.

9 Q Didn't you or Mr. Beers or Mr. McCormick  
10 state to Mr. Keaten and the others in October of  
11 1979 that if you had been given more people prior  
12 to March 28, '79, you would have expanded the scope  
13 of almost all training programs?

14 MR. MacDONALD: Are you reading from some  
15 particular line on the page?

16 MR. FISKE: Sure.

17 MR. MacDONALD: Point the witness to it.

18 MR. FISKE: Sure. Page -- if that helps  
19 him.

20 MR. MacDONALD: I don't know if it helps  
21 him.

22 MR. FISKE: Page 2. Notes of the Keaten  
23 interview. "If the training staff had been  
24 given more people (prior to March 28), they  
25 would have expanded the scope of almost all

1  
2 training programs."

3 Q Isn't it a fact that a statement to that  
4 effect was made by you, Mr. Beers and Mr. McCormick?

5 A I can only speak for myself. I don't  
6 recall making that statement.

7 Q The notes further say, "This specifically  
8 was directed towards increased and improved  
9 classroom training for the various training programs."

10 Is it your testimony that you didn't  
11 make that statement?

12 A I don't recognize that statement or  
13 recollect that statement or having made that statement.

14 Q Is it your testimony that neither  
15 Mr. McCormick nor Mr. Beers made that statement?

16 A Sir, I have no idea what statements or  
17 recollect what statements Mr. Beers or Mr. McCormick  
18 made.

19 Q You don't recall one way or the other,  
20 is that it?

21 A I don't recall what they said, period.

22 Q You were there the whole time they were  
23 there, isn't that correct?

24 A I recall being called out of the room or  
25 going out of the room to make a phone call. I know

there was some period of time I was not in that room.

Q How long were you out of the room?

A I have no recollection.

Q Was this a telephone call that you left the room to place or was it a call that had come in to you?

A I don't recollect what it was.

I recall leaving the room and going to the telephone, but I don't recollect the reason or whether it was incoming or outgoing.

Q Who was the telephone conversation with?

A I don't recall.

Q How long was this interview?

A I have no recollection of the length of the interview any more.

Q How long were you out?

A I have no recollection of that time period either.

Q The next sentence in this memorandum of the interview with you, Mr. Zechman, Mr. Beers, Mr. McCormick, is, "This content has been eroding down through the years."

Do you see that?

A No, sir.

Where are you at?

Q Immediately following the sentence that says, "This specifically was directed toward increased and improved classroom training for the various training programs."

The next sentence is, "This content has been eroding down through the years."

Did you make that statement to Mr. Keaten and the others?

A Sir, I don't recognize the content -- I don't recognize or can put into context that sentence from any conversations that I had there.

Q Does that mean you don't remember whether or not you made that statement?

A I don't recall making that statement.

Q Did Mr. Beers or Mr. McCormick make that statement while you were there?

A Sir, I answered a while ago. I don't recall what statements either Mr. McCormick or Mr. Beers made at that meeting.

Q You mean as you sit here now, you can't remember a single thing either one of them said at the meeting even with this memorandum in front of you?

A Sir, I'm trying very hard to recall that

1  
2 moment when they were speaking. I just can't recall  
3 what they -- what specifically came out from them.  
4 I just can't.

5 Q Directing your attention to the sentence,  
6 the one further down in the memorandum, "Much of what  
7 was stripped out of the program (especially  
8 auxiliary OP) was the amount of" -- a couple of things  
9 crossed out -- "classroom or personal training (in  
10 favor of OJT) and the virtual elimination of formal  
11 classroom training in the basics (heat transfer,  
12 reactivity, math, shielding, et cetera)."

13 Did you make that statement to Mr. Keaten  
14 and the others at that meeting?

15 A I don't recall making a statement  
16 specifically as it is written. I do recall discussing  
17 past and present auxiliary operator training programs  
18 and changes that took place relative to them.

19 Q But do you remember saying to Mr. Keaten  
20 and the others in words or substance that much of what  
21 was stripped out of the classroom training -- withdrawn.

22 Do you remember saying to Mr. Keaten in  
23 words or substance that much of what was stripped out  
24 of the training program was the amount of classroom  
25 or personal training, in favor of on-the-job training?

1

2

MR. MacDONALD: He just answered the question a minute ago.

3

4

A I answered the question to the best I know how. I told you I didn't recognize the framework with which -- the way it is stated here, as not my recollection of how I expressed myself at that time.

5

6

7

8

Q Did you say to Mr. Keaten in words or substance that prior to the accident, there had been a virtual elimination of formal classroom training in the basics, heat transfer, reactivity, math, shielding?

9

10

11

12

13

MR. MacDONALD: Objection. He just told you what his answer was three times now.

14

15

Q You may answer.

16

17

A I believe I just answered that question, sir.

18

19

Q Well, if you did, I have not heard the answer.

20

21

A I said I don't recall making the statement as is written here.

22

23

Q Did Mr. Beers or Mr. McCormick make a statement to that effect?

24

25

A I told you I don't recall specifically what Mr. Marshall Beers or McCormick said at that

1  
2 meeting.

3 Q Do you know any reason why the person who  
4 wrote these notes would have written down at this  
5 interview someone had stated that there was a virtual  
6 elimination of formal classroom training in the basics  
7 unless it had been said by either you, Mr. Beers, or  
8 Mr. McCormick?

9 MR. MacDONALD: Objection. You are  
10 asking for his present-sense interpretation  
11 of why somebody wrote things on a page that  
12 he doesn't even recall seeing, and I instruct  
13 him not to answer.

14 You are asking him to speculate.

15 MR. FISKE: Does he know a reason as  
16 to why the person who took the notes of this  
17 interview would write down that it had been  
18 stated that there had been a virtual elimination  
19 of formal classroom training in the basics  
20 unless Mr. Zechman or Mr. Beers or Mr. McCormick  
21 had said it.

22 If it is "No," he can say "No."

23 MR. MacDONALD: It is a present-sense  
24 impression.

25 A For all I know, he could have written it

2 some time after the meeting. It would be pure  
3 speculation on my part. I don't know.

4 MR. MacDONALD: Is this a good time  
5 to break for lunch?

6 MR. FISKE: Sure.

7 (Whereupon, at 12:45 o'clock p.m., a  
8 lunch recess was taken.)

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## AFTERNOON SESSION

(2:30 p.m.)

R I C H A R D        W.        Z E C H M A N,        resumed.

MR. FISKE: Could we have the last question and answer.

(Record read back.)

MR. FISKE: I would like to mark as the next exhibit a memorandum to Mr. Zechman dated September 13, 1979 from Mr. McCormick and Mr. Beers.

(Memorandum to Mr. Zechman dated September 13, 1979 from Mr. McCormick and Mr. Beers marked B&W Exhibit No. 566 for identification as of this date.)

EXAMINATION (Continued)

BY MR. FISKE:

Q Are you reading that memorandum, Mr. Zechman?

A Yes, I am. I have not read it entirely.

Q Did you receive that memorandum from Mr. McCormick and Mr. Beers on or about September 13, 1979?

A Yes, I did.

Q Had you received that memorandum by the

1  
2 time you wrote the memorandum to Mr. Lawyer dated  
3 September 17, 1979 which was marked as the previous  
4 B&W exhibit?

5 A Yes, I did.

6 Q Referring to again your memorandum of  
7 September 17, 1979 which is B&W Exhibit 565, referring  
8 again to the first page of that document, do you have  
9 that in front of you? --

10 A Yes.

11 Q -- directing your attention to the  
12 third paragraph and the sentence that says, "You  
13 will recall in Frank Kelly's audit report of  
14 our training efforts in the past, his statement:  
15 'It is our opinion that the subject training  
16 organization, like the majority of similar  
17 organizations at other nuclear power plants, is  
18 understaffed and overworked. Some evidence of  
19 carelessness appeared during the review and this  
20 is often the sign of overworked conditions.'"

21 Do you remember writing that sentence?

22 A Yes, I do.

23 Q Did you underline "understaffed and  
24 overworked"?

25 A I underlined that.

1  
2 Q The reference to Frank Kelly's audit  
3 report, is that to the PSQ?

4 A PQS.

5 Q The report that you identified earlier  
6 in your testimony?

7 A Yes.

8 Q And that was a review as your memorandum  
9 indicates of your training efforts in the past,  
10 was it not?

11 A To the best of my recollection.

12 MR. FISKE: Let me mark as the next  
13 exhibit, B&W 567, a document entitled "A  
14 Pedagogical Review of Operator Training" --  
15 withdrawn.

16 It was marked as B&W 234.

17 Start again.

18 Q I will show you a document which has  
19 been marked as B&W Exhibit 234 entitled "A Pedagogical .  
20 Review of Nuclear Operator Training at Three Mile  
21 Island Nuclear Plant."

22 Do you have that in front of you?

23 A Yes.

24 Q Do you recognize this as the final  
25 report of the College of Engineering from Pennsylvania

1  
2 State that you referred to earlier?

3 A I recognize this as the document --  
4 pedagogical review of Penn State's -- pedagogical  
5 review of operator training at Three Mile Island.

6 I have no recollection at this time if  
7 this is the final draft or a final copy of it.

8 Q But in any event, you recall that Met Ed  
9 did receive this report from the College of  
10 Engineering at Penn State?

11 A I recall they received a report of that  
12 title.

13 Q And I believe yesterday you answered  
14 some questions about the circumstances generally  
15 under which that report was prepared.

16 A We discussed some things about it.

17 Q In other words, we are not talking,  
18 when we talk about Exhibit 234, about some report  
19 that hasn't previously been identified in this  
20 deposition?

21 MR. MacDONALD: Are you asking whether  
22 or not this report is the same one he was asked  
23 with reference to yesterday?

24 MR. FISKE: Yes.

25 A If that is your question, the answer is

yes.

Q Did you receive a draft of this report at some point before it became final?

MR. MacDONALD: I object. I don't know whether Mr. Zechman established that as a final report or whether or not it is a draft of a final report.

Your question assumes it is.

Q So there is no question about it, did you receive a draft of the report by the College of Engineering at Penn State before it became final?

A To the best of my recollection, we did.

MR. FISKE: Let me mark as the next exhibit, which is B&W 567, a memorandum from Sandy Lawyer dated January 24, 1980 to J. Thorpe, subject: "Penn State Committee - Initial Draft Report," with an attachment dated January 22, 1980.

(Memorandum from Sandy Lawyer dated January 24, 1980 to J. Thorpe, subject: "Penn State Committee - Initial Draft Report," with attachment dated January 22, 1980, marked B&W Exhibit No. 567 for identification as of

1  
2 this date.)

3 Q Do you recognize that?

4 A I recognize a review document similar  
5 to this.

6 Whether this is the one I reviewed at  
7 that time, I have no recollection.

8 Q Looking at Mr. Lawyer's cover memorandum,  
9 that is directed to Mr. J. Thorpe, is it not?

10 A Yes, it is.

11 Q Who is Mr. Thrope?

12 MR. MacDONALD: At what time?

13 MR. FISKE: At that time.

14 A I'm sorry, I don't recollect his title at  
15 this moment.

16 Q He was with GPU nuclear?

17 A To the best of my recollection.

18 Q You will see the list of carbon copies  
19 at the bottom.

20 A Yes.

21 Q Mr. Keaten we have talked about before.

22 What was Mr. Broughton's position at  
23 that time?

24 A To the best of my recollection, he worked  
25 in tech functions, and I believe he worked for

1  
2 Mr. Keaten.

3 Q Who was D. E. Hetrick?

4 What was his position at that time?

5 A I don't recall his title.

6 Q Mr. R. W. Zechman, what was your position  
7 at that time?

8 A Supervisor of training.

9 Q A. M. Dowbert?

10 A Anne Dowbert. I believe she was  
11 administrative assistant. I forget what her title  
12 was.

13 Q Who was O. Smith?

14 A NUS contractor working in our department  
15 at the time.

16 Q Who was G. A. Sullivan?

17 A Also a consultant working in our  
18 department at that time. I forget what company he  
19 was from.

20 Q Do you see the last paragraph of that  
21 memorandum from Mr. Lawyer saying, "Please provide  
22 me with comments on the attached document. By copy  
23 of this memo, I am also requesting similar comments  
24 from the cc recipients"?

25 You were a cc recipient of the attachment

1  
2 to Mr. Lawyer's memorandum?

3 A According to the cover letter I was, yes.

4 Q Did you understand from this memorandum,  
5 Mr. Zechman, that you and others at Met Ed were  
6 being invited, in effect, by the people at Penn State  
7 to make whatever comments you wanted to make on the  
8 draft that they had prepared and that they would take  
9 those comments into account in preparing their final  
10 report?

11 MR. MacDONALD: I don't think you have  
12 established whether or not he recalled receiving  
13 a memorandum from Mr. Lawyer.

14 MR. FISKE: I think he said he did.

15 MR. MacDONALD: Your question assumes it.

16 MR. FISKE: Read the question again.

17 (Record read back.)

18 MR. MacDONALD: My objection stands.

19 Q You may answer.

20 A It was my understanding that comments  
21 were invited.

22 What was to be done with those comments,  
23 I don't know that I fully understand -- well, I  
24 understand we were asked for comments, but I don't  
25 recall what was going to be done with those comments.

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Q Did you understand that the people at Penn State were going to listen to your comments, consider your comments in determining what final conclusions they were going to reach in the final report?

I am not asking you to testify as to whether you thought they were going to accept them all or reject them all; simply whether you understood as part of the process they were giving you an opportunity to comment and they would consider those comments before they made their final report.

A It was my understanding at that time that we were asked to prepare comments and that they would review those comments, and what they would do with them was unknown to me.

Q I would like to direct your attention to the material beginning on the bottom of page 5 of the attachment to Mr. Lawyer's memorandum where it says, "In addition to the above, Penn State has the following specific comments on the GPU training program:"

Do you see that sentence?

A Yes, I do.

Q I would like to then direct your

attention to the next page, paragraph C.

MR. MacDONALD: Mr. Zechman, read A and

B first.

Q Have you read that?

A Yes.

Q The second sentence says, "For example, most of the present CRO training programs (500" --

A Where are you at?

Q Paragraph C.

A I'm sorry. I didn't read C yet. My apologies.

Now I'm ready.

Q "For example, most of the present CRO training programs (500 hours compared to the total of 550 hours) involves self-study on the job."

Do you see that?

A I see that statement.

Q Did you express any objection to Penn State that that statement was inaccurate?

I will withdraw that question and see if I can restate it and move this along a little faster. I will put the question again.

I will read the whole paragraph to you.

"A large portion of the training is accomplished

1  
2 through the use of on-the-job training and self-study.  
3 For example, most of the present CRO training (500  
4 hours compared to the total of 550 hours) involves  
5 self-study on the job. Such a technique is  
6 satisfactory for subjects such as piping layout,  
7 procedures, system design descriptions and system  
8 schematics. It's completely inadequate for reactor  
9 theory, health physics, and other complex technical  
10 subjects. Because of this, GPU should revise their  
11 training program to include more in-depth classroom  
12 instruction in these areas."

13 I have just read you paragraph C on  
14 page 6.

15 Do you recall making a written comment  
16 for the benefit of Penn State on that paragraph?

17 A I recall making comments to Penn State on  
18 this report. At this time I have no recollection  
19 what portions or what comments I made at that time.

20 MR. FISKE: I will mark as the next  
21 exhibit, which is 568, a document entitled  
22 "Comments - Penn State Review Committee  
23 Report," dated February 6, 1980 to Doc Smith  
24 from Richard W. Zechman, supervisor of training.

25 (Document entitled "Comments - Penn

1  
2 State Review Committee Report,"  
3 dated February 6, 1980, to Doc Smith from  
4 Richard W. Zechman, supervisor of training,  
5 marked B&W Exhibit No. 568 for identification  
6 as of this date.)

7 Q Have you had a chance to look at this  
8 three-page document, Mr. Zechman?

9 MR. MacDONALD: I don't think he is  
10 finished.

11 Q I don't think you really need to take  
12 the time to compare this --

13 A It doesn't balance, sir. That is why  
14 I am looking.

15 MR. MacDONALD: Give him a few moments,  
16 if you will.

17 MR. FISKE: I have a couple of specific  
18 questions I want to ask.

19 MR. MacDONALD: He wants to take the  
20 time to go through it. Please give him that  
21 opportunity.

22 MR. FISKE: He can certainly take as  
23 long as he wants, but I just have one or two  
24 questions.

25 MR. MacDONALD: That is fine.

1  
2 Q You had had an opportunity to look at  
3 B&W Exhibit 568, is that correct?

4 You have just had an opportunity to  
5 review that?

6 A I was reviewing -- well, yes. I scanned  
7 this one and tried to match it against 567.

8 Q Let's take Exhibit 568 and turning to  
9 page 3, at the bottom, is that your signature,  
10 "Richard W. Zechman"?

11 A That is my signature.

12 Q And you were a supervisor of training  
13 on February 6, 1980?

14 A That is correct.

15 Q This memorandum is directed to Doc Smith,  
16 is that correct?

17 A That is correct.

18 Q Can you tell us who Doc Smith was  
19 on February 6, '80?

20 A He was a consultant from NUS who  
21 worked directly with Sandy Lawyer.

22 Q Is he the same as the O. Smith that is  
23 carbon copied on Mr. Lawyer's memo to Mr. Thorpe?

24 A That is correct.

25 Q I would like to direct your attention

to page 2 of Exhibit 568, item 7.

Do you see that?

A I see item 7.

Q It reads, "PSU. Comment 'C' and 'D',  
page 6."

Do you see that?

A I see that.

Q Then under "Comments" there is one  
word, is there not?

A There is one word.

Q What is that one word?

A "Agree."

Q Mr. Zechman, I would like you to look at  
the notes of Mr. Keaten which are marked Exhibit 350.  
I believe it's the microfilm which are the notes  
of Mr. Keaten, of the interview October 1979 with you  
and Mr. Beers and Mr. McCormick about which we have  
had considerable discussion today.

I would like to direct your attention to  
page 2. The statement at the bottom of page 2 of  
Mr. Keaten's notes as I read it is, "Recently have  
had verbal feedback (mid-78-79) from shift supervisors  
that training in basics was lacking."

Do you see that?

1  
2 Did you say to Mr. Keaten at the meeting  
3 in words or substance that the training department  
4 had had verbal feedback in mid-78-79 from shift  
5 supervisors that training in the basics was lacking?

6 A To the best of my recollection, I don't  
7 recall making that statement.

8 Q You don't recall saying anything then to  
9 Mr. Keaten?

10 Do you recall saying anything to Mr. Keaten  
11 along the lines that people in the training department  
12 had received any kinds of complaints or information  
13 from shift supervisors that they felt that training  
14 in the basics was lacking?

15 A Not to the best of my recollection.

16 Q Did Mr. McCormick or Mr. Beers make  
17 any statements to that effect?

18 A I think I already testified that I don't  
19 recall their statements at that meeting.

20 Q Do you see right above the notes that  
21 I just read on that same page, the statement that  
22 says, "Shift in emphasis was from theory to hardware  
23 based on assumption that Navy nukes would have a  
24 basic background"?

25 A I see that.

1

2

Q Did you say anything like that?

3

A Not to the best of my recollection.

4

Q Did Mr. McCormick or Mr. Beers?

5

A I have no recollection what Mr. Beers  
6 or Mr. McCormick said at that meeting.

7

Q I would like to go back, Mr. Zechman,  
8 to page 6 of the attachment to Mr. Lawyer's  
9 memorandum to Mr. Thorpe which is the draft of the  
10 Penn State report and direct your attention  
11 specifically to paragraph B at the top of page 6.

12

It reads, "A review of the topics covered  
13 in the various training programs did not identify  
14 any material on heat transfer and fluid flow or  
15 elementary system dynamics. To understand the  
16 technical basis for the design and operation of a  
17 reactor plant, one must be familiar with not only  
18 reactor theory, but heat transfer and fluid flow.

19

. "In addition, it's essential that one be  
20 familiar with system dynamics in order to understand  
21 the expected response of a reactor plant under  
22 transient conditions.

23

"Accordingly, sections covering this  
24 material should be added to the CRO and SRO training  
25 programs."

1

2

Do you see that paragraph?

3

A I see it.

4

Q Did you agree with the statement,

5

Mr. Zechman, to understand the technical basis

6

for the design and operation of a nuclear plant, one

7

must be familiar with not only reactor theory but

8

also heat transfer and fluid flow?

9

A That was a long statement.

10

THE WITNESS: Could I have that read

11

back, please?

12

(Record read back.)

13

Q I will phrase it a different way.

14

Did you express any disagreement

15

with the statement that to understand the technical

16

basis for the design and operation of a reactor

17

plant, one must be familiar with not only reactor

18

theory but also heat transfer and fluid flow?

19

MR. MacDONALD: Express it to whom?

20

MR. FISKE: To anybody.

21

THE WITNESS: May I have that read back,

22

please, and then may I have a break.

23

(Record read back.)

24

A I don't recollect at this time what

25

comments I specifically expressed, either orally or

1  
2 in writing, relative to that -- relative to what  
3 you just asked.

4 Q Wouldn't it be a pretty acceptable  
5 proposition for someone involved in training nuclear  
6 operators that in order to understand the technical  
7 basis for the design and operation of a reactor plant,  
8 an operator should be familiar with not only the  
9 reactor theory, but heat transfer and fluid flow?

10 A It's my understanding they would have  
11 to be familiar with the reactor theory and the  
12 heat transfer associated with the characteristics and  
13 operation of the reactor at a point in question.

14 Q Similarly, looking at the next sentence  
15 in small "b," wouldn't it be a perfectly acceptable  
16 proposition for someone involved in training  
17 nuclear operators that an operator should be familiar  
18 with system dynamics in order to understand the  
19 expected response of a reactor plant under transient  
20 conditions?

21 MR. MacDONALD: His recollection at the  
22 time he read it?

23 MR. FISKE: Yes, in that period of time;  
24 just a basic concept, that's all.

25 A I would agree that one would have to be

1  
2 familiar with the system in the realms of what a  
3 reactor operator needs to know, the system dynamics  
4 and expected responses as taught by the vendor who  
5 designed that reactor.

6 Q I am perfectly willing to let that  
7 answer stand, but I don't think that is what I was  
8 asking you.

9 MR. MacDONALD: You can let any answer  
10 you want stand.

11 Q The question I was asking is, as a matter  
12 of experience and someone who has been involved  
13 in training nuclear operators, isn't it a perfectly  
14 basic concept that an operator should be familiar  
15 with system dynamics in order to be able to understand  
16 the expected response of the plant under transient  
17 conditions?

18 A Sir, there are many different types of  
19 reactors and many different types of expected  
20 responses with those reactors. It would have to be  
21 those expected responses on a specific plant as  
22 taught, as far as I'm concerned, as taught from the  
23 manufacturers of the plant.

24 Q What you are saying, he would have to be  
25 familiar with system dynamics in order to understand

1  
2 the very types of expected responses you just  
3 described?

4 MR. MacDONALD: His answer is what it  
5 was.

6 MR. FISKE: I don't believe it's responsive  
7 to the question.

8 MR. MacDONALD: Whatever your thought,  
9 whether or not his answer is responsive, he  
10 gave you an answer.

11 You want to rephrase it and put it  
12 in your terminology?

13 MR. FISKE: This is a totally different  
14 question, and you know it and I know it.

15 Q If you want to take a break because  
16 you don't understand the question, I am perfectly  
17 willing to do that, but you are not answering the  
18 question I asked.

19 MR. MacDONALD: He asked for a break  
20 about four minutes ago before you ever asked  
21 that question. It has nothing to do with what  
22 he understood. Don't imply he asked for a break  
23 because you asked that question.

24 MR. FISKE: Maybe the need for the break  
25 continued on to the next question.

1  
2 MR. MacDONALD: He asked for the break  
3 five minutes ago.

4 MR. FISKE: I don't think there is any  
5 dispute.

6 A I think I answered your question.

7 Q You have not. I will ask it again.  
8 If you want to take a break first, that is perfectly  
9 all right with me.

10 A Let's finish the question first.

11 Q You have told us in the last two answers  
12 that you gave to the question that I put that  
13 different types of reactors could have different  
14 types of responses, and you have said that you  
15 thought it was important to an operator to  
16 understand what those different types of responses  
17 could be from different plants.

18 Isn't that the substance of what you  
19 just said?

20 A Not exactly, sir.

21 Q Whether I state it correctly or not, I  
22 would like to go back for the third time to the  
23 sentence in paragraph "b" which says, "It is  
24 essential that one be familiar with system dynamics  
25 in order to understand the expected response of a

1  
2 reactor plant."

3 I am simply asking you whether you didn't  
4 agree at the time you received this memorandum with  
5 that basic proposition.

6 MR. MacDONALD: He answered your question.

7 Do you want to ask it again?

8 A I stand firm in the way I answered that  
9 question just previously, sir.

10 Q The last sentence of this paragraph --

11 A May I have a break, please?

12 Q Sure. I thought we were going to finish  
13 the paragraph.

14 MR. MacDONALD: I thought it was a  
15 question.

16 MR. FISKE: I have one last question  
17 on this paragraph and then I should be through.

18 THE WITNESS: Go ahead.

19 Q The last sentence of the paragraph says,  
20 "Accordingly, sections covering this material should  
21 be added to the CRO and SRO training programs."

22 A I see that.

23 Q I refer you to your comments to  
24 Mr. Smith dated February 6, 1980 with respect to  
25 comment "b" on page 6 and ask you if I am correct

1  
2 that your written comment with respect to that  
3 entire paragraph was "Agree that heat transfer and  
4 fluid flow be added to CRO/SRO training curriculum."

5 MR. MacDONALD: I object. You have built  
6 in an assumption.

7 MR. FISKE: Read the question again.

8 (Record read back.)

9 Q I will ask you, is there any other  
10 comment reflected on Exhibit 568 with respect to  
11 comment "b" on page 6 other than what I have just  
12 read?

13 A Sir --

14 Q What is the answer?

15 A There is something wrong with my comments  
16 matching up with this document. They don't match, sir.  
17 I'm not sure that this -- they don't match. I'm not  
18 sure that these comments are reflected against this  
19 draft.

20 Q We can go through that some more after  
21 the break. I want to be sure that we agree on what  
22 the comments are because Mr. MacDonald expressed some  
23 ambiguity about that.

24 A Can we do that after the break, sir?

25 Q Sure.

(Recess taken.)

MR. FISKE: I think the record should indicate that we have had a recess of half an hour, and now Mr. MacDonald wants to put something on the record.

MR. MacDONALD: I am just saying that the witness is finished for the day, he informs me, because he has a headache and is tired and is no longer able to physically continue. I apologize. There is nothing else I can say to you. It has happened before, and I'm sure it will happen again in the course of depositions.

It has happened to me and I understand it happens to witnesses.

MR. FISKE: The testimony ended at 3:35 when a recess was taken, and it is now 3:55.

MR. MacDONALD: We can reflect I was here for a half hour after lunch. I don't want to get into that on the record.

MR. FISKE: We will resume at 9:30 tomorrow morning.

MR. MacDONALD: If we can resume at

(Continued on next page.)

9:30 tomorrow morning, that would be fine with us.

(Time noted: 3:55 p.m)

RICHARD W. ZECHMAN

Subscribed and sworn to  
before me this day  
of , 1982.

CERTIFICATE

STATE OF NEW YORK )  
: ss.:  
COUNTY OF NEW YORK )

I, ROBERT CAPUZELO, a Notary  
Public of the State of New York, do hereby  
certify that the continued deposition of  
RICHARD W. ZECHMAN was taken before  
me on March 11, 1982 consisting  
of pages 157 through 271;

I further certify that the witness had  
been previously sworn and that the within  
transcript is a true record of said testimony;

That I am not connected by blood or  
marriage with any of the said parties nor  
interested directly or indirectly in the matter  
in controversy, nor am I in the employ of any  
of the counsel.

IN WITNESS WHEREOF, I have hereunto set my  
hand this 16<sup>th</sup> day of March, 1982

Robert Capuzelo  
ROBERT CAPUZELO

## I N D E X

WITNESS	PAGE
Richard W. Zechman	159

## E X H I B I T S

B&W		FOR IDENT.
561	Copy of a document entitled "TIMI-2 Investigation Task Force Interviews, 10/16/79"	180
562	Notes made by the witness on a yellow pad	180
563	Copy of a memorandum dated 12/20/79 from Mr. Zechman to L. L. Lawyer	198
564	Copy of a memorandum from James P. O'Hanlon	199
565	Memorandum dated September 17, 179 from Mr. Zechman to Mr. L. L. Lawyer	229
566	Memorandum to Mr. Zechman dated September 13, 1979 from Mr. McCormick and Mr. Beers	245
567	Memorandum from Sandy Lawyer dated January 24, 1980 to J. Thorpe, subject: "Penn State Committee - Initial Draft Report" with attachment dated January 22, 1980	250
568	Document entitled "Comments - Penn State Review Committee Report" dated February 6, 1980 to Doc Smith from Richard W. Zechman, supervisor of training.	256