

ORIGINAL

UNITED STATES
NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF:

METROPOLITAN EDISON COMPANY

(Three Mile Island Nuclear Station,
Unit No. 1)

DOCKET NO: 50-289SP

(Restart Remand on
Management)

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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In the Matter of: :
: Docket No. 50-289SP
METROPOLITAN EDISON COMPANY :
: (Restart Remand on
: Management)
(Three Mile Island Nuclear Station, :
United No. 1) :
-----X

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Monday, November 19, 1984

The hearing in the above-entitled matter was
convened, pursuant to notice, at 10:03 a.m.

BEFORE:

JUDGE IVAN W. SMITH
Chairman, Atomic Safety and Licensing Board

JUDGE SHELDON J. WOLFE
Member, Atomic Safety and Licensing Board

JUDGE GUSTAVE A. LINENBERGER, JR.,
Member, Atomic Safety and Licensing Board

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APPEARANCES:

On behalf of the Licensee:

ERNEST BLAKE, Esquire
DAVID R. LEWIS, Esquire
Shaw, Pittman, Potts & Trowbridge
1800 "M" Street, N. W.
Washington, D. C., 20036

On behalf of Three Mile Island Alert:

LYNNE BERNABEI, Esquire
Government Accountability Project
1555 Connecticut Avenue, N. W.
Washington, D. C., 20036

JOANNE DOROSHOW, Esquire
The Christic Institute
1324 North Capitol Street
Washington, D. C., 20036

On behalf of the NRC Staff:

JACK R. GOLDBERG, Esquire
LOIS R. FINKELSTEIN, Esquire
Office of the Executive Legal Director
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

On behalf of the Commonwealth of Pennsylvania:

THOMAS Y. AU, Esquire
Assistant Counsel
Department of Environmental Resources
101 South Second Street
503 Executive House
Harrisburg, Pennsylvania 17120

SueTraylor

I N D E X

2	<u>Witness</u>	<u>Direct</u>	<u>Cross</u>	<u>Redirect</u>	<u>Recross</u>	<u>Board</u>
3	Herman M. Dieckamp					
4	- Resumed -					
5	By Ms. Bernabei	28605				
5	By Judge Smith					28738
6	Luncheon Recess - Page 28678					

8	<u>L A Y - I N S</u>
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9	Deposition Pages 121 and 122	
10	of Mr. Dieckamp	Following Page 28632
11	Deposition Pages 24 and 25	
11	of Mr. Arnold	Following Page 28635

E X H I B I T S

	<u>Identified</u>	<u>Received</u>
14	TMIA Exhibit Number 2	28536
15	TMIA Exhibit Number 6	28596
15	TMIA Exhibit Number 7	28597
16	TMIA Exhibit Number 8	28604
16	TMIA Exhibit Number 9	28607
17	TMIA Exhibit Number 10	28641
17	TMIA Exhibit Number 11	28653
18	TMIA Exhibit Number 12	28668
18	TMIA Exhibit Number 13	28710
19	TMIA Exhibit Number 14	28752

(10:03 a.m.)

P R O C E E D I N G S

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3 JUDGE SMITH: Good morning. Is there any preliminary
4 business except for your motions?

5 MS. BERNABEI: There is one preliminary matter. Judge
6 Wolfe had inquired of me whether interrogatory answer concerning
7 Mr. Crimmins can be marked as an exhibit. Our review of the
8 transcript shows that it was not marked as an exhibit.

9 MR. BLAKE: Judge Wolfe and Ms. Bernabei, I should add
10 to that that the Crimmins' response to the interrogatory was one
11 of the subjects that we discussed at the prehearing conference on
12 the 13th. It is one of those items that I agreed to go back and
13 look at with regard to a stipulation.

14 We have worked on that stipulation over the weekend.
15 I would hope that by tomorrow I would be able to present it to the
16 Board and to Ms. Bernabei, and it will include our willingness to
17 put that Crimmins' letter included as a stipulated piece of
18 evidence.

19 JUDGE SMITH: All right. We had deferred your offer
20 of certain exhibits until this morning.

21 MS. BERNABEI: Yes, thank you. The first one was what
22 has been identified earlier as TMIA Mailgram Exhibit No. 2. It is
23 the portion of the Seelinger log, March 29, 1979.

24 JUDGE SMITH: All right. This is the one that is
25 missing from my group. That is the one -- we were short at one time.

1 This is the one I had originally marked. This is
2 fine.

3 MS. BERNABEI: Originally, we had identified this
4 Exhibit in connection with a witnesses testimony prior to, I believe
5 it was Mr. Lo's, in fact, and that there was a stipulation entered
6 into for the portion of the log we questioned him on.

7 Subsequent to that, we questioned several witnesses on
8 other portions of the log, and that is why I would move it into
9 evidence at this time in its entirety.

10 I think given the fact that we have referred to at
11 least three or four entries, it does appear to be a business record
X 12 in that Mr. Seelinger, I believe, it was Unit 1 Superintendent at
13 the time of the accident, apparently made these entries as a part
14 of his regular business on that day.

15 JUDGE SMITH: Mr. Blake?

16 MR. BLAKE: Judge Smith, I agree with Ms. Bernabei that
17 the initial time this document was referred to there was specific
18 reference to what is indicated as page 9 of the document, and
19 in particular the references at the bottom of that page H-2, and
20 RB.

21 My recollection is that I was willing and did stipulate
X 22 to that portion of this document that it appears in Mr. Seelinger's
23 notes for March 29th, that language.

24 My only other recollection of a reference to this
25 document is during the course of Dr. Zehroski's testimony in

1 reference to the figures which appear at the bottom of page 7.

2 Those indicated as RC-temp, RC-pressure.

3 I oppose the admission. I oppose the admission of this
4 document in its entirety, as I understand the offer. I believe the
5 pertinent relevant and material information that appears on page 9,
6 the entry regarding hydrogen, I have been willing to have placed in
7 evidence and I believe it is in evidence.

8 The remainder of this document without its author or
9 being able to ask what it is all about, or about what entries mean,
10 I think would place into the record unreliable and I don't know its
11 probative value as well.

12 MS. BERNABEI: If I could --

13 MR. BLAKE: Excuse me, Ms. Bernabei. Let me finish.
14 It is not, in my view, a business record. The business record
15 exception for hearsay evidence has real limitations on its usage
16 in order to protect against questions about reliability or probative
17 value, weight, understanding of documents which are introduced under
18 that exception. They are normally documents which are prepared
19 by an individual whose duty it is to prepare and maintain on
20 a regular basis such records for the Company minutes of meetings,
21 the range of financial records and documents which are kept for
22 a Company.

23 These notes, it is apparent from reviewing them, just
24 looking at them, are one individual's notes of occurrences or what
25 he heard, or in fact, what he wrote down on a day. They are not, in

1 my view, business records.

2 I do not know the meaning of a number of these entries
3 in here, and I think it would be improper to allow this entire
4 document into evidence.

5 MS. BERNABEI: If I can correct several things that Mr.
6 Blake said.

7 First of all, we did refer to other portions of the
8 document. Specifically, at least in my memory, and I could be
9 corrected if we went back to the transcript, on page 4, there is
10 a notation reactor building levels radiation.

11 As Mr. Blake said.

12 MR. WOLFE: Hold on, Ms. Bernabei. Turn to page 4.
13 Now, what on page 4 was referred to to your recollection?

14 MS. BERNABEI: I believe we talked about reactor building
15 levels radiation, that is, if my memory serves, Mr. Zebroski talked
16 about monitoring of the reactor building containment, and the first
17 he knew of that that it occurred at 6:00 a.m., on March 31st.

18 MR. BLAKE: I believe that was atmospheric samples he
19 was referring to, not to whether or not the Company was aware of
20 radiation levels in containment.

21 MS. BERNABEI: Well, I don't want to argue. I am just
22 trying to point out in the notes --

23 MR. BLAKE: But it is important that we be accurate
24 in what we say.

25 MS. BERNABEI: Yes, I agree, and if Mr. Blake will allow

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me to correct his misstatements, perhaps we can move on.

On page 6, my memory is that we asked Dr. Zebroski specifically about his knowledge about thermal couple temperatures, five in the range of five hundred to six hundred degrees F. It appears in the middle of the page.

On page 7, we refer to an entry with certain parameters of the reactor.

Mr. Dornsife questioned Dr. Zebroski, I believe, on another portion of these -- of this log having to do with the waste decay tank, specifically on page 9 and 10, certain entries on pages 9 and 10.

I believe I questioned Dr. Zebroski on an entry on page 9 about hot spots in the core, about 9:30 on March 29th.

End Take 1.
MS fols.

Sim 2-1 1

That is all I remember. I believe that in my questioning I did refer him specifically to those portions of the log, as did Mr. Dornsife.

4 In any case, I think that these were produced
5 by the company. As Mr. Seelinger's notes during the accident
6 he had certain responsibilities and I am sure he took these
7 notes with full understanding of his responsibilities. My
8 understanding is that these have been turned over in prior
9 NRC investigations, prior investigations of the accident and
10 as such I think there is no doubt that that it is a business
11 record exception.

12 I would also say that this being an administrative
13 proceeding, we don't have the burdent to show an exception
14 to the hearsay rule. I was offering that in order to demon-
15 strate to the Board the reliability of the document. I think
16 the circumstances under which they were taken demonstrate
17 the reliability.

18 JUDGE LINENBERGER: Mrs. Bernabei, a couple of
19 times in this morning's comments by you you referred to this
20 compilation marked for identification as your Exhibit 2 as
21 a log. Perhaps I have misunderstood something. I have,
22 since it was introduced, viewed this as a collection of,
23 if you will, working notes of various people for various
24 purposes, but I have never thought of it in terms of any
25 kind of log.

Sim 2-3

1 Now how is it that you ascribe it the status of
2 a log which to me is an official record of some sort of some
3 part of a happening?

4 MS. BERNABEI: Perhaps I used that term in the
5 loose sense of the term. There are a number of notes, most
6 of which you do not have before you which are in this form
7 that is chronologically throughout the day with time notations
8 in rough chronological form for each day. I believe from
9 March 28th through the 31st.

10 I assume technically you are correct, Judge
11 Linenberger, that this is not a log that is kept, a control
12 room log. However, it is chronological and it does appear
13 in the same form as others of Mr. Seelinger's notes for
14 the period of the accident.

15 JUDGE SMITH: The Board had previously noted
16 that when we have documents such as of this nature that we
17 were not going to just accept a large document into evidence
18 without some specific understanding as to which part of
19 it would be available to the Board for findings and there-
20 fore being available to the parties to propose findings.

21 Mr. Blake makes generally correct arguments
22 about the hearsay exception, that is Exception 6 to Rule 803
23 about Mr. Seelinger and the circumstances under which the
24 notes were made.

25 It is not a typical record of regularly conducted

Sim 2-3

1 activity which is the Federal Rules of Evidence version of
2 the shop brook rule. It was not a regularly conducted
3 activity to have a circumstance such as this, nor is it
4 apparent that it was Mr. Seelinger's regular duty to maintain
5 his notes.

6 On the other hand, there seems to be no dispute
7 that they are Mr. Seelinger's notes and they do seem to
8 be in the pertinent parts illogical. They are certainly
9 much more reliable than just a random piece of paper found
10 in the company's files.

11 I would propose that one of two approaches be
12 pursued. One is that the exhibit be received, but no citation
13 to the exhibit will be honored by the Board in our decision
14 if it is made out of the context of a particular reference
15 by a particular witness.

16 If you have serious misgivings about the relia-
17 bility of this document, Mr. Blake, I think that then we
18 had better pursue it by having Mr. Seelinger come here. But
19 I do believe the document has the basic elements of reliability.
20 It is apparently a record of what was happening at the time.
21 It was made, according to the face of it, at the time the
22 events were unfolding. The pertinent parts of the document
23 that Ms. Bernabei is relying upon seem to be clear in their
24 import.

25 So it seems to me that the document for the

Sim 2-4

1 limited purpose for which it is used does meet the general
2 conditions of reliability which we would require in
3 administrative hearings of this nature.

4 My proposal, and perhaps the most convenient
5 proposal would be to receive the document, but with the
6 express understanding that it can only be cited in connection
7 with the testimony that was connected to it, the oral
8 testimony which was connected to it. That would be my
9 proposal.

10 MR. BLAKE: I have no objection.

11 JUDGE SMITH: I beg your pardon?

12 MR. BLAKE: I have no objection to your proposal.

13 JUDGE SMITH: You have no objection. It seems
14 to me ---

15 MR. BLAKE: My concern, obviously, Judge Smith,
16 was what use might be made or interpretations or characteriza-
17 tions which are to have been made from this set of words
18 or that set of words from this document which would concern
19 me when we get to the findings stage.

20 JUDGE SMITH: Well, I noted that Ms. Bernabei
21 agrees, too. So I don't think there is a dispute.

22 How about you, Mr. Goldberg?

23 MR. GOLDBERG: No objection.

24 JUDGE SMITH: Mr. Au, are you satisfied with that
25 arrangement?

Sim 2-5

1 MR. AU: Yes, I am, with the notation that
2 some of our questions related to the events sequence.

3 JUDGE SMITH: The sequence, yes. Right. I
4 don't know what to do with that.

5 (Pause.)

6 All right, the document will be received on the
7 basis that I outlined.

8 (TMIA Exhibit 2, previously
9 marked for identification, was
10 received into evidence.)

11 JUDGE SMITH: That I believe should be pretty
12 much our criterion for acceptance as the case unfolds.

13 MS. BERNABEI: I would offer TMIA Exhibit 6
14 which has been identified as the March 29 and March 30, 1979
15 minutes of a Research Advisory Committee of EPRI referred
16 to in Mr. Zebroski's testimony in part and explained by
17 him.

18 JUDGE SMITH: All right. This one I predict
19 will be not quite as easy. Let's hear from Mr. Blake.

20 MS. BERNABEI: I should state one more thing.
21 I understand that Dr. Zebroski testified that he reviewed
22 this document in preparation for his testimony and provided
23 a basis for his statements about his initial understanding
24 of the accident.

25 JUDGE SMITH: Right. I had no concern about the

INDEX

Sim 2-6

1 use of the document for this cross-examination, but I think
2 that the document on the face of it and standing alone and
3 under the circumstances described by Dr. Zebroski does not
4 have the guarantees of reliability that the Board would
5 need to make any direct findings.

end Sim 6
Sue fols

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1 MS. BERNABEI: Okay. My understanding is that
2 this was prepared by the secretary, either of the Committee
3 or EPRI, that was present. And this was the initial form of
4 the minutes which then became typewritten minutes. The
5 testimony was that he first referred to the typewritten
6 minutes of the meeting to prepare his testimony, when there
7 was no mention of TMI or there was not significant mention
8 of TMI. He then went to the handwritten minutes.

9 That was my understanding. As such, I think they
10 do have reliability of a business record.

11 JUDGE SMITH: It's hard for me to envision what
12 fact or statement of fact in this document there is that
13 this Board could make a particular finding on. I just don't
14 know what it is.

15 I can't anticipate your proposed findings, but
16 what is there that we could find? Just tell me exactly how
17 you want to use it and how you propose that we use it in
18 our decision?

19 MS. BERNABEI: Okay. Fine. The way in which
20 Dr. Zebroski apparently relied on it was to remember or
21 recall what information he had originally been given by
22 his superiors about the TMI accident.

23 He referred to the last portion of the document,
24 Page 4, which gives a status of Three Mile Island apparently
25 conveyed to Mr. Culler by Mr. Dieckamp. In that, Mr. Culler

#3-2-SueT 1 apparently states Mr. Dieckamp told him the accident at Three
2 Mile Island was very serious, significant core damage is
3 apparent. Iodine leakage likely.

4 This is from Dr. Zebroski's testimony, this is
5 Mr. Culler's representation of what Mr. Dieckamp told him
6 about the accident. As such, I think it's probative of
7 Mr. Dieckamp's understanding of the accident on March 30th
8 or before.

9 Obviously, the part we are concerned with is
10 the description of significant core damage apparent.

11 JUDGE SMITH: And that's exactly why I'm con-
12 cerned about the document, the very reason that you want to
13 use it for that purpose.

14 Mr. Blake?

15 MR. BLAKE: This one, under my view of what might
16 be a business record, comes closer because, as Dr. Zebroski
17 testified, Mr. Elsaesser, the author of these notes had, as
18 a duty, to prepare notes of meetings. So in that way, I
19 regard this as, in fact, a more reliable document. I think
20 it ought to be considered to be a more accurate recounting
21 of what took place or, in fact, what people said.

22 So, that takes me back at least --

23 JUDGE SMITH: At the meeting?

24 MR. BLAKE: Yes, sir. Now, that takes me back
25 at least one level. I get over the one level of hearsay,

#3-3-SueT

1 and if I assume then that this last entry which Ms.
2 Bernabei has referred to is a pretty accurate or reliable
3 accounting of what FLC, which was Mr. Culler, reported to
4 that meeting on the 30th, I still have -- and I can't reach
5 how Ms. Bernabei, as I understand it, would have it to be
6 used. These were the words which Mr. Dieckamp gave to Mr.
7 Culler. I -- that I can't be sure of.

8 I think it is clear that what prompted this, in
9 part and maybe in large part, was the call to Mr. Culler
10 from Mr. Dieckamp. But whether or not he used these words
11 or these were Mr. Culler's words, whether or not Mr. Culler
12 put some interpretation on what Mr. Dieckamp said -- I don't
13 have a problem with this document coming into evidence now
14 as what Mr. Culler reported to the Committee after a conver-
15 sation with Mr. Dieckamp.

16 And I would not oppose it for that purpose.

17 JUDGE SMITH: Then, what do we do with it in our
18 findings? What relevance to our decision will there be
19 that a Mr. Culler, whom we don't know and have never seen
20 and has not appeared here, made these statements at a meet-
21 ing?

22 MR. BLAKE: I would not plan to use it in my
23 findings, but as I understand Ms. Bernabei I may have a
24 need to reply to findings where she will use these terms.
25 And I think try to infer from, or imply from them, some level

#3-4-SueT

1 of knowledge on Mr. Dieckamp's part which she will try to
2 make use of. I don't -- I can't interpret -- I can't --

3 MS. BERNABEI: Can I --

4 MR. BLAKE: I can't anticipate for sure.

5 MS. BERNABEI: May I address Mr. Blake's last
6 point? As I understand it, he is saying there are two
7 levels of hearsay, the first of which is gotten over because
8 these appear to be minutes of the secretary of the Committee.

9 I would say that Mr. Culler's statement in this
10 context is similarly in the course of his business responsi-
11 bility. This is an industry group, okay. It's the Research
12 Advisory Committee of EPRI. Mr. Dieckamp apparently con-
13 tacted Mr. Culler not only to inform him what was going on,
14 but in order to engage his help or technical support. At
15 least, that was a portion of the intention of Mr. Dieckamp
16 talking to Mr. Culler.

17 In those circumstances, I think Mr. Dieckamp
18 would be very careful and very precise as to what he told
19 him about the accident. Similarly, I think Mr. Culler in
20 speaking to his organization would be -- given that they
21 may have a role in the accident, would similarly be careful
22 in terms of what he recounted.

23 In that sense, I think that's it's part of both
24 their business responsibility and has has an issue of
25 reliability.

#3-5-SueT

1 JUDGE SMITH: Then, how did we learn that what
2 Mr. Culler is reporting here derived from Mr. Dieckamp?

3 MS. BERNABEI: That's what Dr. Zebroski testified
4 to, from my memory.

5 JUDGE SMITH: You are getting closer together in
6 your position on it. And there is one aspect of it that
7 hasn't been discussed by either of you, and that is the
8 reputed source of this information. Mr. Dieckamp sits here
9 today and is available for examination on it.

10 So, there is not likely to be serious prejudice
11 by accepting the document into evidence.

12 MR. BLAKE: I agree with that, Judge. That's why
13 I'm willing to agree and have the document come in here as
14 is evidence apparently of what Mr. Culler reported but not
15 as to what Mr. Dieckamp said to him. And we have Mr. Dieckamp
16 available to ask him.

17 JUDGE SMITH: Okay.

18 MS. BERNABEI: Well, I don't think we can parse
19 it like that. Generally, the Federal rules of evidence
20 have said that if a document comes in it comes in for what-
21 ever purpose.

22 JUDGE SMITH: I think that you are going to have
23 this basic problem, however, no matter what. And that is,
24 in the last analysis we have to sit here and we have to
25 decide what evidence we are going to believe. Now, I don't

#3-6-SueT

1 know what Mr. Dieckamp is going to say about these notes.
2 But he is here, and he is available for questioning on it.

3 And the person who wrote the notes is not here,
4 and the person to whom he is reporting is not here. So,
5 you can see where you might be going. But I don't see it
6 as a problem.

7 Let's hear from Mr. Goldberg.

8 MR. GOLDBERG: I just wanted to say that I
9 pretty much agree with Mr. Blake's assessment of this,
10 that at this point it's my understanding of Dr. Zebroski
11 testimony that he made it clear that he has no firsthand
12 knowledge that in fact Mr. Dieckamp made an assessment
13 that there was significant core damage apparent and that
14 he is the source of this.

15 He said a couple of times that it was, you know,
16 second, third and fourth-hand hearsay that this is what the
17 notes say but he couldn't personally attribute it to Mr.
18 Dieckamp.

19 I also agree with what you said, in that Mr.
20 Dieckamp is here and I at this point have some questions
21 for Mr. Dieckamp on these notes so that it can be straighten-
22 ed out. But at this point with the offer of this document
23 at this point I think it can be accepted similarly to TMIA
24 Exhibit 2 for the limited purpose of referring to what the
25 witness has said about the document thus far. It would have

#3-7-SueT

1 no more weight than that.

2 JUDGE SMITH: I think that it would go, at least
3 as far as being given, according to Mr. Blake, as being
4 undisputed evidence of what Mr. Culler said at the meeting.

5 MR. GOLDBERG: Yes.

6 JUDGE SMITH: I don't have a direct memory of
7 how Mr. Dieckamp is tied in to Mr. Culler at that particular
8 point. You had better remind us what that is.

9 You say that Dr. Zebroski, but I don't recall
10 the reliability of Dr. Zebroski's -- the certainty of Dr.
11 Zebroski's testimony to the effect that Mr. Dieckamp told
12 Culler this information. I don't recall that.

13 MS. BERNABEI: Well, he referred in his testimony
14 what he knew about the accident. He referred or relied on
15 this account of the meeting.

16 JUDGE SMITH: Yeah, but the account of the meeting
17 does not say Mr. Dieckamp gave this information.

18 MS. BERNABEI: That's my understanding from his
19 testimony here.

20 JUDGE SMITH: That's the testimony that I don't
21 recall.

22 MS. BERNABEI: I think he stated that Mr. Dieckamp
23 called Mr. Culler to ask him about four tasks and to say
24 that things had -- my understanding is -- deteriorated from
25 previously.

#3-8-SueT

1 JUDGE SMITH: But how did he know that? That's
2 what I don't recall.

3 MS. BERNABEI: My understanding is that he knew
4 it from -- in part -- the minutes of the meeting.

5 JUDGE SMITH: Well, how can he learn it from the
6 minutes of the meeting and I can't learn it from the minutes
7 of the meeting? I'm looking at the notes.

8 MS. BERNABEI: Well, I don't think his testimony
9 is accurate. I think that was one of the points of our cross-
10 examination. In fact, the notes say something different than
11 he represented in his testimony.

12 That was one of the points of our cross-examination.

13 JUDGE SMITH: Well, there is no objection to the
14 receipt of the exhibit for the purpose for which you offer
15 it. So, I guess we don't have a dispute.

16 The concern is, having done that, what the Board
17 will do with it.

18 MR. GOLDBERG: Judge Smith, before you rule, I
19 asked Dr. Zebroski a question about this phrase in this
20 document, significant core damage apparent.

21 JUDGE WOLFE: Transcript page, please?

22 MR. GOLDBERG: 28555. And I said: Even as a
23 surmise, do you have any firsthand knowledge that Mr.
24 Dieckamp ever made that statement as reflected in these
25 notes? Answer: As I say, I have only fourth-hand knowledge.

#3-9-SueT

1 MS. BERNABEI: Well, he had such fourth-hand
2 knowledge, and I moved to strike his testimony in part on
3 that basis, and the Board let it in and I think we are
4 entitled to probe the basis. I don't think it's very good,
5 but what he said he said.

6 JUDGE SMITH: All right. So, there really is
7 no dispute at this point on this particular item. So,
8 with that limitation we will receive TMIA Mailgram Exhibit 6
9 for the purpose that that was a statement made by Mr. Culler,
10 and whatever Dr. Zebroski said about it he said.

11 (The exhibit previously marked
12 as TMIA Mailgram Exhibit 6
13 for Identification is received
14 into evidence as TMIA Mailgram
15 Exhibit Number 6.)

INDEXXXXXX

16 MS. BERNABEI: I move TMIA Exhibit 7 into
17 evidence. It's the March 30th, 1979 notes of Dr. Zebroski
18 about a conversation with Mr. Keaten at 9:15 a.m. He refers
19 to this meeting and was questioned about the meeting. Excuse
20 me, the discussion, telephone discussion.

21 JUDGE SMITH: Are there objections?

22 MR. BLAKE: No, no objection from us. And the
23 reason for my lack of objection is that these were identified
24 by Dr. Zebroski. These were his notes of a telephone confe-
25 rence call that he had with Mr. Keaten on Friday, March 30th,

#3-10-SueT

1 and he was available to have the parties ask questions of him
2 regarding these notes after Mr. Bernabei identified them.

3 So, I think this is an appropriate exhibit.

4 JUDGE SMITH: All right. No objections, the docu-
5 ment is received.

6 (The exhibit previously marked
7 TMAI Exhibit Number 7 for
8 Identification is received into
9 evidence as TMAI Exhibit Number
10 7.)

INDEXXXX

11 MS. BERNABEI: I move TMAI Exhibit 8 into evidence.
12 It is notes from March 28th, 1979 of Richard Lentz, one of
13 the five GPU Service Corporation engineers sent to the site
14 on the first day of the accident.

15 I would state that I'm a little surprised at Mr.
16 Blake's objections to some of the notes that are being moved
17 into evidence. I specifically asked him during the discovery
18 portion of this case whether or not we would have to call
19 witnesses, either in discovery or during the hearing, to
20 identify and sponsor documents of this sort.

21 My understanding from him was that if the Company
22 understood what they were and they were in fact notes or
23 identified notes of a specific person, we would not have this
24 problem. So, frankly I'm a little surprised that this is
25 occurring right now.

#3-11-SueT

1 For the Board's information, TMIA Exhibit 8 was
2 produced by Mr. Lentz during his deposition and identified
3 by him to be notes of a meeting he was directed to attend
4 at approximately 11:30 a.m. on March 28th, 1979. In question-
5 ing Dr. Zebroski, I questioned him specifically about the
6 tenth entry on Page 2, which reads: High iodine core damage?

7 It was specifically with reference to a prior
8 question I believe by Mr. Goldberg to which Dr. Zebroski
9 indicated that high iodine did not necessarily mean anything
10 about core damage to him. I then asked Dr. Zebroski: Well,
11 do you know whether or not the GPU Service Corporation
12 individuals, to any extent, believe that high iodine levels
13 would indicate core damage.

14 In any case, I'm not sure it was Mr. Goldberg's
15 question. That was my memory, but it was another question
16 on cross-examination of Dr. Zebroski.

17 end #3
18 Joe flws

1 JUDGE SMITH: Mr. Blake?

2 MR. BLAKE: Let me first react to Ms. Bernabei's
3 characterization of our prior discussions, and I think this is also
4 accounted in exchange of letters.

5 Ms. Bernabei asked whether or not I would have a problem
6 with authenticity of documents which were produced by the Company
7 in the course of discovery. Any my answer was, no.

8 I am not going to say that I don't think this is an
9 authentic document. That, in fact, these were notes by Lentz taken
10 at the time that is indicated on the document. I don't have a problem
11 with that, and I don't think we need to pull a whole lot of people
12 in in order to identify them or determine whether or not they are
13 what they appear to be.

14 My question is the reliability or probative value of
15 what is to be done with these documents, and their meaning. What
16 is it they stand for? What use do we make of them in the end?

17 If I look at Item No. 10, which has been focused on,
18 what in the world does that mean? What was its sense at the time?
19 I do not have a problem stipulating today that in notes taken by Mr.
20 Lentz on March 28, 1979, which apparently were taken at about 11:30,
21 and that there is an Item No. 10 which appears and quote Item No. 10,
22 but within the Board's earlier thought about notes and peoples
23 testimony about them, maybe that cures the problem, but I am not
24 about to go further in stipulating what the meaning of that is
25 or -- it is just not there. We just don't know.

1 MS. BERNABEI: What we do know from Mr. Lentz's deposition,
2 he was questioned in his deposition, and if we wanted to call him back
3 in to talk about that, which I think is a fairly minor point, we can
4 do that.

5 That -- originally my understanding of my agreement
6 with Mr. Blake was that we wouldn't have to bring a witness here to
7 explain this which appear.

8 JUDGE SMITH: What does his deposition say?

9 MS. BERNABEI: His deposition says that he was directed
10 to attend a meeting in the morning period where they were given
11 assignments as to areas to cover.

12 JUDGE SMITH: Right.

13 MS. BERNABEI: You will see certain notations and names
14 by the items.

15 I asked him about No. 10, and my memory is that he spoke
16 about some concern or assignment about assessment of core damage
17 based on some high iodine reading, although he couldn't remember today
18 the source or how the readings came about.

19 JUDGE SMITH: I think that is still within the stipulation
20 that Mr. Blake is willing to -- you still have not identified the
21 dispute between you.

22 I really don't see that there is one.

23 MR. GOLDBERG: Could I say something about this? I asked
24 Dr. Zebroski whether the iodine levels that were actually measured
25 in terms of the state of knowledge that existed at the time of

1 March 28, 1979 were indicative of core damage.

2 And this begins on transcript page 28551, and his answer
3 was: I guess the short answer is, no. May I explain my answer.

4 Then he went on to explain that based on the state of
5 knowledge that existed at that time, they would have expected much
6 higher iodine levels if there had been significant core damage, and
7 in response to that question and answer exchange, Ms. Bernabei
8 offered this document, as I understand it, for the purpose of
9 demonstrating that there was a g. iodine measured, perhaps, which
10 may have indicated core damage, and for that purpose, I would object
11 to the introduction of this document.

12 MS. BERNABEI: That is not the purpose, excuse me,
13 Mr. Goldberg. The purpose of Dr. Zebroski was if you did not
14 believe the iodine levels being measured indicated core damage, to
15 your knowledge did GPU Service Corporation engineers or technical
16 people have a concern about that?

17 And he said, no, not that I know about.

18 That is the point in which I introduced the note.

19 That is what the notes indicate to me.

20 MR. GOLDBERG: If I could finish, I don't believe that
21 these notes indicate that. I think on its face this is a list of
22 assignments that people had as far as what they were going to inquire
23 into and consider, and Item No. 10 is an indication that if there were
24 high iodine ratings -- readings, might it not be indicative of
25 core damage, and Mr. G. Bend was assigned that task.

1 JUDGE SMITH: I think that the document and the deposition
2 -- stipulation covers several points,, and that was there was a
3 meeting at 11:30 on March 29, 1979, in which one G. Bend was
4 assigned a task of inquiring into whether either does high iodine
5 present indicate core damage, or, is high iodine present and if so,
6 does it indicate core damage.

7 MS. BERNABEI: I think, perhaps, the best reference
8 would be the Lentz deposition in terms of the exact wording, since
9 these are his notes.

10 JUDGE SMITH: I am reading the words. You disagree
11 that those are the two possible interpretations of what we could
12 infer from those notes?

13 MR. BLAKE: No.

14 MS. BERNABEI: No. What I am just suggesting is that
15 we go with Mr. Lentz, whatever his representation --

16 JUDGE SMITH: It is not in. It is not in evidence.

17 MS. BERNABEI: No. What I am suggesting is for a
18 stipulation that we stipulate Mr. Lentz -- that this was mentioned
19 and apparently to the author of the note indicate the following, and
20 just --

21 JUDGE SMITH: You mean he has some special insight
22 because he was present? What does he say that the note means?

23 MS. BERNABEI: Well, we are trying to find the
24 deposition.

25 MR. BLAKE: It appears on page 26, in Mr. Lentz's

1 deposition, and I can read a couple of sentences.

2 JUDGE SMITH: What is it?

3 MR. BLAKE: Question: Now, Item 10 is high iodine
4 core damage? Is that correct?

5 Answer: Yes.

6 Question: What does that mean. In other words, what
7 did that conjunction mean. What was discussed at the meeting that
8 led you to write that?

9 Answer: That if any of the contamination that was in
10 the auxilliary building had high iodine content, or whatever, if
11 it would have been caused by core damage, I guess.

12 Question: Now, who was that assigned to. Is it G.
13 Bender, is that correct?

14 Answer: Gordon Bond, I believe.

15 Question: What position was he at that time?

16 Answer: I believe he was licensing then. I am just
17 guessing.

18 That is the end of the exchange.

19 JUDGE SMITH: Is that fine with you?

20 MS. BERNABEI: That is fine.

21 JUDGE SMITH: All right. Then let's stipulate the
22 deposition testimony.

23 MR. BLAKE: That portion of it which I just read.

24 JUDGE SMITH: Which you just read, together with your
25 exhibit, and the two are inseparable; the exhibit and that portion

1 of the deposition just read into the record are inseparable.

2 We will not consider any part of this exhibit if
3 another aspect of it were cited.

4 So, with limitation, we will receive into evidence
5 TMIA Exhibit 8.

6 (TMI-A Exhibit 8, previously
7 identified, is received in evidence.)

8 Is that it? I think that is it, isn't it?

9 Are you now prepared to resume your cross examination of Mr. Dieckamp?

10 MS. BERNABEI: Yes. I still have one housekeeping
11 matter. We have taken up the Board's offer of use of a set of
12 exhibits, but we have not found -- as far as I know -- have not
13 received a copy of the joint exhibits, so I would request as soon
14 as possible a copy of those exhibits.

15 JUDGE SMITH: Isn't that -- having produced the signature
16 of Mr. Devine, hasn't that somehow become your problem?

17 MS. BERNABEI: No. We never received the documents. What
18 we received is an envelope for which he signed, and he can do an
19 affidavit to that effect, but he never received the boxes, and we
20 have checked several times.

21 MR. BLAKE: We are checking further, and continued to
22 go back to the service which took them over. The package, to which
23 Ms. Bernabei refers to envelope, was physically taped to the boxes,
24 I am told. We will check and we will have another report.

25 JUDGE SMITH: Even assuming that you had them a lost

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1 them, we have to deal with the problem one way or the other. You
2 have to have exhibits.

3 MS. BERNABEI: Right.

4 JUDGE SMITH: So, I don't think we have to waste time
5 with that.

6 Whereupon,

7 HERMAN M. DIECKAMP,

8 a witness introduced on behalf of the Applicant, having been
9 previously sworn, resumes the stand and further testifies as
10 follows:

11 FURTHER CROSS EXAMINATION

12 BY MS. BERNABEI:

13 JUDGE SMITH: Ms. Bernabei, we still have this letter
14 -- the Battesta memorandum, with respect to Mr. Low. Can we
15 disregard this item? You have no intention of offering it?

16 MS. BERNABEI: That is already an exhibit. That is
17 part of the joint --

18 JUDGE SMITH: Oh, all right. But as a separate
19 document we can dispose of it?

20 MS. BERNABEI: Sure. For your information, as I
21 understand our terminology, it is Joint Mailgram Exhibit 1-C,
22 Item 104.

23 JUDGE SMITH: Right.

24 BY MS. BERNABEI: (Continuing)

25 Q Mr. Dieckamp, I would like to return from all that

1 to a number of questions I asked you last Thursday.

2 I believe if it your testimony that you do not recall
3 whether or not Mr. Creitz in the morning prior to your second
4 presentation to the Pennsylvania Public Utilities Commission, gave
5 you readings, offsite radiation releases above background level,
6 is that correct?

7 A That is correct. I have no recollection of that.

8 Q You did speak to Mr. Creitz, did you not, a short time
9 before your second presentation to that meeting, is that correct?

10 A I think my testimony says I spoke with Arnold or
11 Creitz, I am not absolutely sure which one, or both.

12 Q Now, it is fair to say if you did speak to Mr. Creitz
13 he would have given you any information he had about above background
14 offsite releases, would he not?

15 A I don't know what he would have done.

16 Q Do you believe it is likely you would have spoken to him
17 and he would not have given you such information if he had it?

18 A I have no way of knowing that in the sense that I do not
19 know what judgments he may have made about relevancy or significance
20 or size or magnitude. I just don't know.

21 Had he known something that he considered significant,
22 I feel confident he would have told me.

23 Q And isn't it fair to say that you talked to him or
24 Arnold specifically in order to prepare or have information for a
25 second presentation to the PUC around 11:30 a.m.?

1 A Yes, that is right.

2 MS. BERNABEI: I would like to mark for identification
3 as TMIA Exhibit No. 9, a document entitled Task 12, March 28, 1979.
4 Previously identified by Mr. Creitz in his deposition as a chronology
5 of his activity for that date of March 29th.

XXXX INDEX

6 (Above referenced document is marked
7 TMI-A Exhibit No. 9 for identification.)

8 BY MS. BERNABEI: (Continuing)

9 Q Mr. Dieckamp, I would like to refer you to page 5 of
10 TMIA Exhibit 9.

11 A My copy does not seem to have page 9.

12 Q That is correct. We did not number them. It is the
13 5th page of that exhibit. I would like to refer you to the 11:00
14 a.m. entry, and ask you whether or not that indicates that Mr.
15 Creitz was informed of above background levels of radiation
16 by 11:00 a.m., on March 28th?

17 A It says Creitz talked to Arnold after becoming
18 aware of measured radiation above background.

19 Q That would indicate, would it not, that at 11:00
20 a.m., he knew -- Mr. Creitz knew about radiation above
21 background level?

22 A I think it would.

23 Q And yet you went to the PUC about 11:30 a.m., and
24 said that there was no evidence of above background
25 radiation levels, is that correct?

1 A That is right.

2 Q I believe you have also testified on this subject
3 in this proceeding that radiation -- that you were aware of
4 radiation alarms through your morning conversations with
5 Mr. Arnold and Mr. Creitz, is that correct?

6 A Yes, that is correct.

7 Q Now, I believe it is also your testimony that
8 radiation alarms do not necessarily indicate offsite
9 releases, is that correct?

10 A That is correct. Depending on where the alarm
11 is, and what it is measuring.

12 Q It is true though, is it not, that the radiation
13 alarms which you knew about at 9:00 a.m., indicated potential
14 offsite releases?

15 A I can't be clear about exactly which ones I know
16 about. I think it is true that the radiation detector in
17 the containment was the basis for beginning to look at
18 and calculate offsite releases, yes.

19 At least to calculate the potential for
20 offsite releases.

21 Q Isn't it true that the offsite -- excuse me -- the
22 radiation alarms of which you were informed at the 9:00 a.m.,
23 conversations with Mr. Arnold and Mr. Creitz were such
24 alarms that indicated potential offsite releases?

25 A Could you give me the question again?

1 Q Yes. Isn't it true -- I think you said that you
2 were aware of radiation alarm from conversations -- that
3 radiation alarms had been activated as a result of
4 conversations with Mr. Arnold and Mr. Creitz in the 9:00
5 a.m. period.

6 What I am asking you, the ones that you were
7 aware of, were they not the radiation alarms which
8 indicated potential offsite releases, specifically the
9 reactor building or containment alarm?

10 A I think that is something that I know now. I am
11 not sure at the time that I recognized the correlation.
12 I am just checking back to look at my notes from that
13 conversation, and I don't see a reference there to
14 radiation alarms or radiation levels, but I think I was
15 aware of radiation alarms.

16 I don't have any sense, though, of an understanding
17 of the correlation between those measurements and offsite
18 releases.

19 Q When did you come to an understanding which you
20 apparently possess today that such alarms would indicate
21 potential offsite releases?

22 A I cannot establish a time. I think as time
23 moved along, the -- probably the prime example of that
24 was the incorrect forecast of the potential radiation
25 levels at Goldsboro, but I don't know just when I became

1 aware of that.

2 Q Do you remember if it was a short time or a long
3 time after the accident when you were first, according to
4 your account, aware that these -- actuation of these
5 alarms indicated potential offsite releases?

6 A A short time, and I don't know how long that
7 was.

8 JUDGE SMITH: There was a leap in the testimony
9 that I didn't follow. Do you agree with the premise of
10 the last two questions that these alarms would indicate
11 offsite releases?

12 WITNESS: No, I don't agree to that.

13 JUDGE SMITH: Well, twice now you have answered
14 it as if you do, I believe.

15 WITNESS: No, I thought the answer was that they
16 indicated the possibility of, which I would take is
17 different than actually indicating offsite releases.

18 BY MS. BERNABEI: (Continuing)

19 Q Isn't it true that after becoming aware of
20 these alarms, which you now know indicate a potential
21 for offsite releases, you stated to the PUC you were
22 unaware of any impact of release that would have an
23 interaction with the general public?

24 That is, your first presentation to the PUC
25 on March 28th?

1 A Would you read that again, please?

2 Q Yes. Isn't it true that after learning of the
3 actuation of the alarm, which you now know to indicate a
4 potential release of offsite radiation, you told the PUC
5 you were unaware of any impact or release that would have
6 an interaction with the general public in the environ of
7 the plant?

8 A Well, what I told the PUC at 11:30 --

9 Q No, no. Mr. Dieckamp, can you answer my question
10 yes or no? I tried to be very precise.

11 A I cannot answer it yes or no.

12 Q I would like to refer you to transcription of your
13 comments at approximately 9:00 a.m., on that date,
14 specifically a sentence which appears two-thirds down the
15 paragraph. It reads, does it not: I am unaware of any
16 impact or release which would have an interaction with
17 the general public in the environs of the plant.

18 Is that correct?

19 A Yes.

20 JUDGE SMITH: Referring to your Exhibit 4?

21 MS. BERNABEI: Thank you, Judge Smith.

22

23 End 4.

24 MS fols.

25

Sim 5-1

1 BY MS. BERNABEI:

2 Q Mr. Dieckamp, if I can attempt to characterize
3 your general testimony about your activities on March 28th,
4 is that you were not informed and did not take steps to
5 inform yourself of specific conditions or parameters of
6 the reactor; is that correct?

7 A I did not take steps to delve into the details
8 or the specific parameters of the reactor. I felt that I
9 was reasonably informed from talking to Creitz and Arnold
10 and Herbein and Miller and Kunder and hearing the
11 Lt. Governor's press briefing in the morning.

12 Q Is it fair to say that they did not give you or
13 tell you any specific parameters of the reactor or any
14 specific events which had occurred during the day?

15 A The various discussions told me a fair amount
16 about the scram of the reactor, the shutdown of the reactor,
17 the initiation of the emergency safeguard features and the
18 conversations did not include discussions of flow rates
19 or outlet temperatures or things of that nature.

20 Q Now it is very say that you have a very good
21 technical background in the nuclear field, modesty aside,
22 or most in the industry would consider that you have such?

23 A I think that depends.

24 Q You have a depth of background in the nuclear
25 field, that is fair to say?

Sim 5-2 1

2 A I had a considerable amount of experience
3 in nuclear technology at the time of the accident. I was
4 not at all aware or knowledgeable about the specifics of
5 pressurized water reactors, their systems, their controls
6 and things of that sort.

7 I have gained an awful lot of awareness since
8 March 28th, 1979.

9 Q But isn't it true that you were with respect
10 at least to Three Mile Island aware of the design and
11 construction group responsible for the project and in fact
12 were the direct supervisors for the service corporation
13 individuals who were primarily responsible for that effort?

14 A That is true. The design and construction
15 group of the service company reported to me. I don't think
16 immediately of what you have in mind when you say two groups.

17 Q Oh, excuse me. I mean two individuals.
18 Mr. Voraki first and then Mr. Arnold; is that correct?

19 A Oh, two individuals sequentially in the same
20 job, yes.

21 Q Okay. Over what period of time of the construc-
22 tion, the design and construction of TMI did you maintain
23 such a direct supervisory relationship over Mr. Arnold
24 and Mr. Voraki?

25 A The were in charge of the design and construction
of the plant at the time I joined the company in the 1st of

Sim 5-3

1 March of 1973, and I continued on that general positio. until
2 some time after the accident.

3 Q Is it fair to say that you also maintained during
4 this period of time an awareness of any problems which
5 occurred during the design and construction of Three Mile
6 Island?

7 A Yes, that is true.

8 Q And you also sat in on meetings where there were
9 programs, specific programs discussed or contracts with major
10 contractors discussed?

11 A To some degree that is true.

12 Q And it is fair to say that because of your back-
13 ground and interest in the technical issues of building
14 TMI that you communicated with Mr. Herbein even though you
15 had no direct supervisory authority over him?

16 A Yes, I had occasional direct cor- .ications with
17 him.

18 Q So it is fair to say that you had a degree of
19 involvement with the design and construction of Three Mile
20 Island because of your background in the nuclear field
21 with interests specifically in technical issues and communica-
22 tion with other senior officials that your position alone
23 would not dictate?

24 A Well, I don't know what the position would or
25 would not dictate, but the things that we have just gone

Sim 5-4

1 through in terms of my involvement are a fair representation
2 of it. I would only add though that that is a long way
3 from getting down to the details of the plant hardware and
4 its systems and its operation.

5 As an example, I would say to you that on March
6 28th, 1979 I don't think I knew what the PORV was. Now once
7 someone explains it to me, I understand what it is, but I
8 was not knowledgeable about specific plant systems and their
9 detailed purpose or the procedures for operating.

10 Q It is fair to say that you did know the acceptance
11 criteria for emergency core cooling systems, did you not?

12 A I have become relatively familiar with that
13 because in I think the time period of one or two years
14 prior to the accident there was a considerable effort
15 associated with the licensing of the Oyster Creek boiling
16 water reactor fuel that involved what was happening at that
17 time in terms of, if I recall correctly, changes to those
18 emergency core cooling criteria.

19 Q So it is fair to say that you knew on March 28th,
20 1978 that above temperatures of 2200 degrees Fahrenheit one
21 could not ensure that the emergency core cooling systems
22 would work so as to prevent a meltdown or other damage
23 to the reactor?

24 A I was aware that 2200 degrees F was the design
25 criterion for the emergency cooling systems. I have testified

Sim 5-5

1 on several occasions before that one of my immediate reactions
2 was one of concern about the apparent inconsistency between
3 saying that the emergency systems had functioned as intended
4 and that there were indications of failed fuel.

5 I could not have gone on at that time and given
6 you a correlation between temperature and degree of core
7 damage.

8 Q Is it fair to say that you knew the emergency
9 core cooling systems above 2200 degrees, that their successful
10 operation in bring the reactor to cold shutdown could not
11 be ensured?

12 A I am sorry. I lost the thread of that.

13 Q It wasn't a good question.

14 It is fair to say that you knew on March 28th,
15 1979 that if the core reached temperatures over 2200 degrees
16 the emergency core cooling systems could not be ensured to
17 work as they were designed to work if it was above the design
18 criteria?

19 A The question wanders around. I knew that 2200
20 degrees Fahrenheit was the design criteria. I knew that the
21 criteria for the emergency core cooling system were such
22 as to prevent temperatures going above 2200 degrees Fa.

23 Q And if in fact temperatures reached above 2200
24 degrees, one could not ensure the safe shutdown of the
25 reactor for accidents postulated in the FSAR; is that correct?

Sim 5-6

1 A Again, I would not have said it that way myself.
2 What I knew was that the 2200 was recognized as a temperature
3 that should not be exceeded. I don't think that necessarily
4 means that the plant could not be safely shut down or safely
5 cooled.

6 Q Obviously, Mr. Dieckamp, what I am talking about
7 is there is no assurance that it can be brought to a safe
8 shutdown. Isn't that what the regulations provide?

9 A I don't understand them that way.

10 JUDGE SMITH: This is where I have difficulty
11 following this.

12 MS. BERNABEI: I am just trying to explain ---

13 JUDGE SMITH: I understand, but you are talking
14 about acceptance criteria, and I don't know if you are talking
15 about the design criteria for this plant as it is represented
16 in the FSAR or the acceptance criteria for ECCS as set out
17 in the regulations.

18 MS. BERNABEI: It is for ECCS as set out in the
19 regulations.

20 JUDGE SMITH: All right. If that is the case
21 there is a thread of illogic in your questioning, I believe.

22 MS. BERNABEI: I am trying to establish
23 Mr. Dieckamp's depth of knowledge about TMI and accidents
24 in general.

25 JUDGE SMITH: Right. But, as I understand your

Sim 5-7

1 questions now, they have been a line that has been not
2 directed at TMI, although you did refer to the FSAR, but
3 directed to his knowledge of the regulation?

4 MS. BERNABEI: Right.

5 JUDGE SMITH: Now does the regulation determine
6 whether his particular plant can be safely shut down?

7 MS. BERNABEI: Yes, it does.

8 JUDGE SMITH: I will have to look at that
9 regulation.

10 MS. BERNABEI: It provides that there is no
11 assurance above 2200 degrees.

12 JUDGE SMITH: That regulation provides that?

13 MS. BERNABEI: That is the way I read it.

14 JUDGE SMITH: Or does it provide that you have
15 to have an ECCS that will achieve certain objectives?

16 MS. BERNABEI: It provides that your ECCS must
17 for accidents postulated in the FSAR, that they only need
18 to function up to 2200 degrees Fahrenheit. Once you are
19 outside that limit, you are operating outside normal and
20 emergency operating procedures. That is my understanding.

21 JUDGE SMITH: I will have to read that regulation
22 because you are presenting it to me in a new light.

23 BY MS. BERNABEI:

24 Q Mr. Dieckamp, can you refer to your notes which
25 you took at March 28th, TMI Exhibit 3?

Sim 5-8

1 A Yes, I have it here.

2 Q There are certain notations at the bottom of
3 those notes, are there not, and I am talking now not about
4 the 8/9/84, but certain calculations immediately above that
5 entry.

6 A Yes.

7 Q Now that, as I understand it, is the flow to
8 cool the reactor at full power; is that correct?

9 A The copy that I have in front of me is not good
10 at all. But I don't think that is correct. I think that ---

11 Q What are those calculations?

12 A Well, I think that notation was intended to
13 guess at how deep the water would be if there was 30,000
14 gallons.

15 Q Now you wrote that notation, did you not?

16 A I think so. Yes, I did.

17 Q How did you do that calculation?

18 A Well, I made some very round-house assumptions
19 and calculated the volume of the building. In fact, I
20 can't see it here. Was it 120 feet or 150 feet diameter?
21 If I have the original I would be able to tell you. I made
22 that kind of an assumption. I said if the building is "X"
23 feet in diameter and there is no structure and it is just
24 an open tank, how many feet of depth would get you to
25 30,000 gallons. There were some generous roundings. I know

Sim 5-10

1 this looks like I have got seven gallons per cubic foot, for
2 example, and that is not quite right.

3 Q And how did you know the volume of the building?

4 A I didn't. I guessed at the diameter of the
5 building and I think I used pie D squared over four.

6 Q What was the purpose of doing this calculation?

7 A I was curious about how much water was 30,000
8 gallons I believe.

9 Q Did you transmit your calculations or the
10 results of those calculations to anybody else in the company?

11 A No, I did not. You can see from that calculation,
12 and again recognizing that it is a very crude approximation,
13 that you would get 150,000 gallons per foot, and that is
14 the number then that is repeated sort of northeast from the
15 calculations. So that would imply at that time in my
16 thinking that 30,000 gallons was just two or three inches
17 of water in the basement of the building.

18 Again, I want to hasten to add that that is a
19 crude back-of-the-envelope calculation simply for the
20 purpose of orienting my own thinking.

21 Q Again, that calculation is based on your
22 understanding of the volume of the auxiliary building; is
23 that correct?

24 A No. It starts from a crude assumption of the
25 diameter of the containment building.

Sim 5-11

1 Q What was your reporting or other supervisory
2 relationship to Mr. Keaten at the time of the accident?

3 A He did not report directly to me. I think he
4 probably -- I am not sure -- but I think he probably reported
5 to Mr. Wilson who in turn reported to Mr. Arnold.

6 Q Okay, and Mr. Arnold in turn reported to you;
7 is that correct?

8 A That is correct.

9 Q Now you had known Mr. Keaten at the time of the
10 accident for some time; is that correct?

11 A Yes, I had.

12 Q Okay. Did you know him in your prior employment
13 with Rockwell?

14 A Yes, I had.

15 Q How many years did you know Mr. Keaton at the
16 time of the accident?

17 A I can't be sure, but I would guess somewhere
18 in the range of five to ten years.

19 Q And you had a confidence in his ability to
20 analyze accidents and transients; is that fair to say?

21 A He was one of our more knowledgeable people
22 in terms of the thermodynamic and thermalhydraulic, the
23 dynamic thermalhydraulic behavior of the plant.

24 Q So your answer is yes, that you did have
25 confidence in terms of his analysis of accidents and

Sim 5-12

1 transients?

2 A I had confidence in his ability to analyze a
3 facet of or a portion of an accident or a transient like
4 Three Mile Island.

5 Q And in fact you played a part in the company,
6 in Mr. Arnold's decision to assign him to do an investigation
7 of the accident because of your confidence in his abilities?

8 A Do you have a specific investigation in mind?

9 Q The Keaten investigation, the so-called Keaten
10 investigation into the accident which I believe was begun
11 in July.

12 A I don't know whether I did or did not suggest
13 to Arnold that Bob Keaten be involved. It is possible that
14 I could have. I don't have a recollection of having directed
15 that he be involved, but it is possible that in the course
16 of reviewing names that I could well have found Keaten to
17 be a good member.

18 Q Did you speak to Mr. Keaten at any time on
19 March 29th?

20 A I don't think so.

21 Q And it is fair to say that you have no notes
22 from March 29th that are currently in existence; is that
23 correct?

24 A That is correct.

25 Q In fact, you have no notes for any time after

Sim 5-13

1 the morning of March 28th through the evening of March 29th;
2 is that correct?

3 A I have no notes for March the 29th. March 29th
4 is a day when ---

5 Q No. I am just asking if you have notes or not.

6 A I do not have any notes for March the 29th.

7 Q And it is fair to say that you have no notes
8 for the afternoon of March 28th?

9 A I think that is right. The only notes I have
10 from March 28th is a scrap of paper that was put into
11 evidence.

12 Q However, you do have rather extensive notes from
13 March 30th and thereafter; is that correct?

14 A That is correct. I would not call them extensive,
15 but there are notes.

16 Q Now were you aware on March 28th or March 29th
17 that Mr. Arnold or Mr. Richard Wilson had sent a group of
18 five engineers to the site, service corporation engineers?

19 A I have no recollection of that on March the
20 28th. I have no direct recollection on the 29th. There is
21 the matter of Arnold reviewing with me and signing out the
22 setting up of a task force to investigate the situation.
23 I am very ready to believe that in the course of that activity
24 or that discussion Arnold very likely told me about other
25 people having already been sent to the site, but I just

Sim 5-14

1 don't have a recollection of my own.

2 Q If you remember, Mr. Arnold, on the morning of
3 March 29th signed out a memorandum or drafted a memorandum
4 for your signature setting up a task force to analyze the
5 accident; is that correct?

6 A That is correct.

7 Q And you met with him in Parsippany or Mountain
8 Lakes sometime during the morning of March 29th; is that
9 correct?

10 A Yes.

11 Q And that was about 10 a.m. in the morning?

12 A I don't know, but I think that is reasonable.

13 Q And at that meeting you discussed with Mr. Arnold,
14 did you not, the extent of core damage at TMI?

15 A I have no recollection of that kind of a
16 discussion, and if we did, I certainly had a very limited
17 understanding or awareness of what those words might have
18 met.

19 Q I am going to now cite from Mr. Arnold's testimony.
20 Do you remember that you discussed with Mr. Arnold
21 significant core damage in that morning meeting?

22 A That does not help me to remember.

23 Q Okay. That is what Mr. Arnold previously
24 testified, is it not?

25 A If you say so.

Sim 5-15

1 MR. BLAKE: Can we have a reference, please,
2 of the citation to the Arnold testimony to which counsel
3 refers?

4 MS. BERNABEI: Yes. It is the special inquiry
5 group testimony of September 24, 1979.

6 BY MS. BERNABEI:

7 Q Mr. Dieckamp, do you know whether or not you
8 did in fact talk to Mr. Arnold about significant core damage?

9 A I have no recollection of that. I have since
10 talked to Bob Arnold about that passage in his deposition,
11 prior depositions, and my understanding is ---

12 Q No. I am asking your memory and your under-
13 standing, Mr. Dieckamp and not Mr. Arnold's.

14 MR. BLAKE: Than I object. You have asked the
15 question and he has answered that he has no specific
16 recollection.

17 MS. BERNABEI: I am not sure that is correct.
18 I have used Mr. Arnold's testimony to refresh his recollection
19 and I would like him now to answer the question.

20 MR. BLAKE: And you asked him that question and
21 he said it didn't refresh his recollection.

22 MS. BERNABEI: I don't believe that is correct.

23 JUDGE SMITH: That is my memory of it, but as
24 I understand, you interposed an objection while Mr. Dieckamp
25 was still answering.

Sim 5-16

1 Had you completed your answer, Mr. Dieckamp?

2 THE WITNESS: Well, Judge Smith, I was only
3 going to say that I have no direct recollection of my own
4 concerning discussions with Bob Arnold about core damage
5 on March the 29th. I have in the course of this proceeding
6 become more aware of his testimony on this subject. I talked
7 to him about it since then and ---

8 MS. BERNABEI: I am going to object. Excuse,
9 Mr. Dieckamp. This is non-responsive to my question. I asked
10 him if he had any other memory. I didn't ask about Mr. Arnold.

11 JUDGE SMITH: Okay. Well, just stop your answer
12 at that point, Mr. Dieckamp.

13 BY MS. BERNABEI:

14 Q Mr. Dieckamp, do you remember testifying in
15 your deposition that you may have talked to Mr. Arnold about
16 significant core damage at that meeting?

17 JUDGE SMITH: All right. You just want this
18 information in the sequence that you want it. Is that your
19 concern? I mean he was just explaining the very question
20 that you are asking right now. I am just trying to follow
21 what your purpose and point is.

22 MS. BERNABEI: I am asking him about what his
23 knowledge and memory is. He said something in his deposition
24 and I am just trying to establish ---

25 THE WITNESS: I would like to see that portion
of the deposition, if I might. Can you give me a reference?

#6-1-SueT

1 MS. BERNABEI: Yes, I believe it's at 121.

2 WITNESS DIECKAMP: I would be happy to read my
3 answer to your question in that deposition.

4 BY MS. BERNABEI: (Continuing)

5 Q That's not what I asked --

6 A I don't know whether --

7 Q -- you, Mr. Dieckamp. Mr. Dieckamp, excuse me.

8 A Yes.

9 Q That's not what I asked you. I asked you whether
10 or not you testified that you may have spoken to Mr. Arnold
11 about significant core damage.12 A And my answer today would have to be the same as
13 it was then.14 Q Mr. Dieckamp, can you answer the question yes or
15 no? Your counsel --

16 A I cannot --

17 Q -- will have an opportunity.

18 JUDGE SMITH: Wait a minute. Wait a minute. We
19 will have to take this one step at a time. But before we
20 can untangle what your dispute is, I have to have a better
21 explanation.22 Are you free to tell us where you are going with
23 this line of questioning? And maybe we can get there in a
24 more accurate and direct way.

25 MS. BERNABEI: Yes. I'm just trying to establish

#6-2-SueT

1 that there is other testimony, Mr. Arnold's, and apparently
2 Mr. Dieckamp has conceded that he may have talked about
3 core damage, significant core damage, with Mr. Arnold on
4 the morning of March 29th. That shows a level of awareness
5 which he has not previously acknowledged.

6 JUDGE SMITH: Okay. Then, he has testified that
7 he has no independent memory of speaking with Mr. Arnold
8 in that context as he sits here today, and now you are going
9 to establish that in earlier testimony he did seem to have
10 such a memory.

11 MS. BERNABEI: That's right.

12 JUDGE SMITH: Now, she has a right to establish
13 that and indeed you will have a right to explain fully. So,
14 between the two of you you will both I think achieve your
15 objectives.

16 Mr. Blake, you have no objection?

17 MR. BLAKE: No. But I am anxious that the witness
18 get an opportunity to explain his answers.

19 JUDGE SMITH: Yes.

20 MS. BERNABEI: It seems to me -- because this may
21 come up again -- that Mr. Blake will have an opportunity
22 to question Mr. Dieckamp and clear up anything he thinks
23 needs clarification to put in the right light in his per-
24 spective.

25 JUDGE SMITH: That's true. However, you have to

#6-3-SueT

1 also appreciate that the Board has to wrestle with this re-
2 cord when it is completed. And on important points like this
3 it is for me much easier to identify what the whole record
4 is and what the reliable record is if the explanation follows
5 soon after the confusion.

6 It is from the point of view of presiding, too.
7 It is much easier.

8 MS. BERNABEI: What I would propose, since this
9 may come up at other times -- I'm not sure -- is that we
10 introduce that portion of the deposition testimony that we
11 were referring to so the Board would have the opportunity --

12 MR. BLAKE: Agreed. I'm willing to stipulate in
13 Page 121 in its entirety through Mr. Dieckamp's answer at
14 the top of Page 122 which finishes on Line 6.

15 MS. BERNABEI: Okay. I just don't think that's
16 a good way to cut into this examination. I think that may
17 be a way to settle it and I'm glad Mr. Blake is amenable,
18 but I would like to continue my examination of Mr. Dieckamp.

19 JUDGE SMITH: Sooner or later we are going to have
20 in close proximity to this exchange a full explanation. And
21 it's going to be sooner.

22 MS. BERNABEI: Okay.

23 BY MS. BERNABEI: (Continuing)

24 Q Mr. Dieckamp, did you say in your deposition
25 that you may have discussed core damage, even significant

#6-4-SueT

1 core damage with Mr. Arnold on the morning of March 29th?

2 A May I read the sentence where I say that?

3 I said: We may have discussed core damage and I think one
4 has to recognize the probable definition of core damage or
5 significant core damage at that time.

6 Q Thank you.

7 A That's what I said in the deposition.

8 Q Thank you. Now, in your testimony you state
9 that you do not remember learning about intermittent HPI
10 operation until some time in the afternoon or evening of
11 March 29th; is that correct?

12 A I think my first awareness of that came from the
13 Jack Herbein briefing to the Congressional visitors on the
14 afternoon of the 29th.

15 Q Now, isn't it true that Mr. Arnold in his prior
16 testimony indicates he remembers a conversation with you
17 about intermittent HPI operation on the morning of March 29th?

18 A I don't recall that.

19 JUDGE SMITH: Excuse me for just a moment. We
20 want to consult.

21 (The Board members are conferring.)

22 You may proceed.

23 MR. BLAKE: Judge Smith, I believe we have now
24 changed to a different subject from the conversation if I
25 understand this as --

#6-5-SueT

1 MS. BERNABEI: No. It's the same conversation
2 on March 29th with Mr. Arnold.

3 MR. BLAKE: Okay. Fine. I didn't want this to
4 go away without getting in this entire portion, particularly
5 so that the Board would be aware of what the context is.

6 MS. BERNABEI: It seems to me that we can handle
7 this as an exhibit after the examination.

8 JUDGE SMITH: Struggling through these transcripts
9 is difficult enough. The reviewing authorities have even
10 greater difficulty reading the transcripts, searching out
11 the deposition.

12 My preference when there is a dispute like this
13 is that the actual pages of the deposition be bound into
14 the transcript at the point of dispute so there can be a
15 side-by-side comparison.

16 MS. BERNABEI: Okay. That's no problem with me.
17 I just don't want my examination interrupted to do that.
18 That's fine.

19 JUDGE SMITH: But -- all right. It is going to
20 have to be soon. If I were starting this whole thing over
21 again, I would have the disputed deposition read into the
22 record exactly at this point so there could be a comparison
23 as your questions and answers proceed.

24 MS. BERNABEI: Then, why don't you give us a few
25 minutes and I will determine what section we want? Because

#6-6-SueT

1 it may be longer than what Mr. Blake wants.

2 JUDGE SMITH: All right.

3 (Pause.)

4 Let's take a short recess. Let's say five minutes
5 while you are getting your thoughts together.

6 (Whereupon, the hearing is recessed at 11:29 a.m.,

INDEXXXXX

7 to reconvene at 11:41 a.m., this same day.)

8 JUDGE SMITH: Are you ready to proceed?

9 All right. At this point, we will have bound into the
10 transcript the entirety of Page 121, and Page 122 through
11 Line 6 of the October 3rd, 1984 deposition of Mr. Dieckamp.12 (At this point, the above-referenced document
13 is bound into the transcript following this page.)
14
15
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25

1 BY MS. BERNABEI:

2 Q Now, in this conversation, did you discuss with
3 Mr. Arnold -- and I'm talking now the time frame when you
4 signed the memo setting up the task force -- about the
5 possibility of significant core damage?

6 A I don't know whether we did or not, and I think
7 the difficulty with the question is the definition of signifi-
8 cant. I would say that my recollection is that at that time,
9 Thursday morning, my appreciation of core damage involved
10 local fuel failures in terms of cracks in the cladding or things
11 of that sort, certainly bearing no relationship to the
12 conditions that actually occurred.

13 Q I'm asking you whether it was discussed, and I'm
14 using the words that Mr. Arnold has previously testified to,
15 whether there was a discussion of significant core damage.

16 A We may have discussed core damage, and I think one
17 has to recognize the probable definition of core damage or
18 significant core damage at that time. And I say, again, that
19 my understanding at that time of core damage or even significant
20 core damage was one of cracked fuel, failed fuel pins such
21 that they lost their integrity as far as containing gas,
22 radioactive gas, which could then have been consistent with
23 the radiation observations.

24 Q You say you may have talked with Mr. Arnold on
25 Thursday morning of significant core damage. If I represent

1 to you that those are words that Mr. Arnold used with regard
2 to that morning meeting, you would not have a problem with
3 that?

4 A I would not have a problem if you and I on the
5 record would have a mutual understanding of what significant
6 core damage meant in that time frame.

#6-7-SueT

1 MS. BERNABEI: Just for reference sake, there is
2 also another reference to this conversation by Mr. Arnold
3 in his -- I misspoke. It's the same one. Excuse me.

4 And I understand Mr. Blake and I are going to
5 determine the other segment of the Arnold deposition to bind
6 into the record at this point.

7 JUDGE SMITH: Other segments? I thought I just
8 read the segment you had agreed upon?

9 MR. BLAKE: You did with respect to the Dieckamp
10 deposition. There was a prior reference to Mr. Arnold's
11 views of the same meeting.

12 I proposed to Ms. Bernabei that we put the entire
13 question and answer from Mr. Arnold's prior deposition where
14 he discusses this into the transcript at the same point, and
15 I think she has agreed to that.

16 MS. BERNABEI: Sure.

17 MR. BLAKE: I will identify it for the record,
18 what it is, and I will provide a copy for the Court Reporter
19 to have it put in.

20 JUDGE SMITH: All right.

21 MR. BLAKE: It appears -- this is an extract out
22 of an item in the parties joint Mailgram Exhibit Number 1.
23 It is C-84, the deposition of Robert Arnold, taken on
24 September 24th, 1979, by the Special Inquiry Group.

25 The pages that we would have bound in at this

#6-8-SueT

1 juncture, or the portions that we would have copied in at
2 this point, starts on Page 24 at Line 23 with the Question,
3 through the Answer that goes all the way through Page 25
4 and stops at Line 18 on Page 26.

5 I will provide a copy of that to the Court Reporter.

6 JUDGE SMITH: There is one difficulty in that,
7 and that is --

8 MR. BLAKE: The Board hasn't seen it.

9 JUDGE SMITH: -- the Board, everybody knows what
10 is going on now except the Board.

11 MR. BLAKE: I will provide my copy to the Board
12 now.

13 JUDGE SMITH: At least, let us stop for a moment
14 and read it.

15 MS. BERNABEI: It is -- the Arnold -- do you have
16 the Dieckamp deposition?

17 JUDGE SMITH: I returned it to Mr. Blake.

18 MS. BERNABEI: Okay. The other is 8-1 of the
19 joint exhibits, the Arnold --

20 JUDGE SMITH: Right. My concern is, as we try
21 to manage the case as we are going along, we should know what
22 is ending up in the record, too. And we should not order
23 things bound into the record unless we agree with it, or
24 approve of it.

25 (Mr. Blake is providing the Board members with

#6-9-SueT

1 a copy of the above-referenced document.)

2 JUDGE SMITH: Excuse me. I understood you to say,
3 Mr. Blake, that Mr. Arnold's deposition would stop at Page
4 25, Line 18 and --

5 MR. BLAKE: No, 26 on Line 18.

6 JUDGE SMITH: Oh, 26.

7 MR. BLAKE: The entirety of 25.

8 JUDGE SMITH: Okay.

9 MS. BERNABEI: I would object to anything past
10 Line 4 on Page 26. That is the discussion on the morning
11 meeting and that is the, sort of, thrust of the question.
12 My reading of the rest of the paragraph is it's not relevant
13 to that morning meeting.

14 JUDGE SMITH: This is going to take a long, long
15 time. Do you agree?

16 MR. BLAKE: Sure. I'm agreeable either way.

17 JUDGE SMITH: All right. So where does the
18 insert stop?

19 MR. BLAKE: She has proposed on Line 4 on Page 26.

20 JUDGE SMITH: All right. So that at this point --

21 (The Board members are conferring.)

22 At this point, then we will have bound in as
23 described by Mr. Blake Mr. Arnold's deposition from Page 24,
24 Line 23 through Page 26, Line 4.

25 (At this point, the above-referenced document is
bound into the transcript following this page.)

23

Q

I think you have discussed in your prior interview

24

the decision Wednesday evening to form up a more or less formal

25

board of investigation. I would like to pass on to Thursday and

1 a. you to just briefly summarize what you did on Thursday
2 with respect to this, so far as you can recall?

3 A Well, I made several phone calls Thursday morning
4 in conjunction with setting up that task force. We got the
5 letter typed up. Wilson and I discussed the authority and
6 manner in which that group would interface with the plant
7 people.

8 I believe we went over and talked with Dieckamp about 11:00
9 o'clock, before Wilson departed for the site, to review with
10 Dieckamp the conclusions that Wilson and I had come to as to
11 the scope and interface of the task force with the plant, and
12 to have Dieckamp sign the letter which established the task
13 group.

14 Dieckamp and I at that time had some conversations about
15 core damage. I think at that time, or very shortly thereafter,
16 we talked about the possibility or the likelihood really that
17 we had experienced some core damage and I think that at that
18 time we were of the opinion that there probably had been some
19 of what I would term in our perspective of that time period
20 significant core damage.

21 If someone wanted me to quantify it, I would say half a
22 percent or a percent failed fuel type situation. During the
23 afternoon, I spent the majority of the time talking with some
24 of my people who were still there and talking with a couple
25 of others, including Bud Cherry, about a project organization,

1 in effect, to identify the nature of the damage to the plant
2 and what we would have to do prior to being able to restart,
3 which involved a fairly detailed listing of the tasks that would
4 have to be undertaken.

#6-10-SueT

1 BY MS. BERNABEI: (Continuing)

2 Q Mr. Dieckamp, I have previously asked you whether
3 or not you were familiar with certain testimony of Mr. Arnold
4 that he had in fact spoken to you on the morning of March
5 29th about throttling of the high pressure injection.

6 And I believe your answer was that you were not
7 familiar with that testimony; is that correct?

8 A Not sufficiently familiar to know what he said.

9 Q Okay. I would like to refer you to the Special
10 Inquiry Group testimony of Mr. Arnold, the September 24,
11 1979, Pages 26 and 27.

12 A My library here doesn't include that.

13 (The witness is provided with the above-
14 referenced documents.)

15 Q Okay. Specifically directing your attention to
16 Page 27, Lines 2 through 14 --

17 A Yes.

18 Q Does that indicate that Mr. Arnold spoke to you
19 in the morning meeting on March 29th about throttling of
20 high pressure injection?

21 A (The witness is looking at documents.)

22 The question again, please.

23 Q Yes. Does the portion of the Question and Answer
24 I have referred you to indicate that Mr. Arnold testified
25 he talked to you about throttling of high pressure injection

#6-11-SueT 1

in the morning meeting with you on March 29th?

2

A He says he thinks he did. Yes.

3

Q Does that refresh your recollection as to whether or not, in fact, you discussed throttling of the HPI with Mr. Arnold in the meeting in which you set up the Task Force?

6

A No, it does not.

7

Q Mr. Arnold goes on to say, does he not, that throttling of the HPI would be one indication of fuel damage?

9

A He also said -- let me say it differently --

10

Q No, no. Mr. Dieckamp, does he say that throttling of the HPI would be one indication of fuel damage?

12

MR. BLAKE: I'm sorry. Could we have a reference?

13

MS. BERNABEI: The same portion to which --

14

MR. BLAKE: What line number are you specifically --

15

MS. BERNABEI: I don't have the interview. It's the same portion to which I referred --

17

MR. BLAKE: Let me share this with you.

18

(Mr. Blake is showing Ms. Bernabei a document.)

19

BY MS. BERNABEI: (Continuing)

20

Q Specifically, Page 27, Lines 19 and 20, doesn't Mr. Arnold indicate that throttling of HPI would be one indication or reason for a belief that there was fuel damage at that time?

24

A He says: I think it was clearly the reason that we felt that it could be fuel damage.

25

#6-12-SueT

1 Q So that's his testimony, is it not?

2 A That's what it says here.

3 JUDGE SMITH: If you are talking about two or
4 three lines, please read it into the transcript.

5 MS. BERNABEI: Mr. Dieckamp can read it in. He
6 basically did read it. It's Lines 19 and 20 on Psge 27.

7 JUDGE SMITH: Well, whomever is more convenient.

8 WITNESS DIECKAMP: The Question was --

9 JUDGE SMITH: You are reading now from Mr.
10 Arnold's interview?

11 WITNESS DIECKAMP: Mr. Arnold's Special Inquiry
12 Group desposition. The Question is: What was your conversa-
13 tion with Mr. Dieckamp about that? Did you say this could be
14 an explanation for how voids get formed and this could mean
15 that the core had been uncovered for some period of time?
16 Do you remember that?

17 Answer: Well, I think that it was clearly the
18 reason that we felt there could be fuel damage. Perhaps
19 let me say it differently. It was both of our expectations
20 that if high pressure injection proceeded in accordance with
21 the design that fuel failure would be precluded. Since we
22 had indications that there had been fuel damage and we knew
23 at that point, or had information at that point, that indicat-
24 ed high pressure injection had been restricted, that is where
25 we made the kind of correlation between reduction of high

#6-13-SueT

1 pressure injection permitting there to have been fuel damage.
2 I don't think it was a case of where we knew high pressure
3 injections had been curtailed and therefore concluded that
4 fuel damage had occurred, but that we had other evidence that
5 there was fuel damage and that without having the curtailment
6 of high pressure injection that would seem to us to be very
7 surprising.

8 It goes on: We talked to some extent at that time
9 as to why the operators would have curtailed high pressure
10 injection and I believe that I indicated to Dieckamp that I
11 would expect they did that because of the indication of the
12 level being high in the pressurizer. I've tried several times
13 to reconstruct or recollect whether or not I knew at that
14 time -- that is Thursday morning -- that the relief valve
15 had been open for some time, and I just don't remember much
16 to my frustration, because obviously in retrospect a lot of
17 things didn't hang together unless one knew more completely
18 the information I can recall knowing at that time.

19 JUDGE SMITH: That's the end of --

20 WITNESS DIECKAMP: Then, it goes to the next
21 question.

22 JUDGE SMITH: All right.

23 BY MS. BERNABEI: (Continuing)

24 Q Mr. Dieckamp, after you signed a memorandum and
25 had this meeting with Mr. Arnold on the morning of March 29th,

#6-14-SueT 1 you proceeded to the site, did you not?

2 A That is correct.

3 Q If you remember, what time did you leave Parsippany
4 to go to the site?

5 A No, I do not recall. I think it was some time
6 before noon but I'm just not sure. I think the meeting at
7 the site might have been scheduled for 1:30 or 2 o'clock,
8 something like that.

9 Q Now how did you -- how was the decision made that
10 you would go to the site to participate in that Congressional
11 briefing?

12 A I can't recount how it was decided. I learned of
13 the visit of these Congressional people. It may simply be
14 that I decided on my own to go. My purpose was not to
15 participate as someone bringing in facts but rather to be
16 there.

17 Q Okay. When did you make this decision?

18 A Some time early enough in the morning to be able
19 to make arrangements to get transportation to get out there.
20 My memory tells me that we chartered an aircraft.

21 Q Who made these arrangements for you?

22 A I don't know. It may well have been my secretary.

23 Q Did Mr. Keaten have any part in making these
24 arrangements?

25 A (The witness nodded in the negative.)

#6-15-SueT 1

Q That is, setting up your schedule for the day?

2

A Oh, I certainly have no awareness of that or any

3

reason to even suspect that he might have been involved.

4

JUDGE SMITH: He indicated no to both of your

5

questions. He shook his head no to the first one.

6

MS. BERNABEI: Yes.

7

BY MS. BERNABEI: (Continuing)

8

Q Mr. Dieckamp, I would like to show you what I will

9

mark as TMIA Exhibit 10. We may not have sufficient copies

10

at this time but we will provide them.

11

(Notes of R. W. Keaten, dated

12

2/15/79 to 1/24/80 is marked

13

as TMIA Exhibit Number 10 for

14

Identification.)

INDEXXXXX 15

(Ms. Bernabei is distributing copies of TMIA

16

Exhibit Number 10 for Identification to the Board members

17

and the parties.)

18

JUDGE SMITH: While you are passing out the

19

exhibit, I would like to ask Mr. Dieckamp to give us some

20

perspective about these trips back and forth to Parsippany.

21

How long is that trip by automobile?

22

WITNESS DIECKAMP: It's just under three hours.

23

JUDGE SMITH: And then by airplane?

24

WITNESS DIECKAMP: By plane, take off and touch

25

down is an hour. And then from my office to the airport

#6-16-SueT 1

2 depending on which one, it may be anywhere from twenty to
3 forty-five minutes.

4 JUDGE SMITH: All right.

5 BY MS. BERNABEI: (Continuing)

6 Q Mr. Dieckamp, I would like to refer you to the
7 entry, I believe it's Page 11 of the exhibit. Some of these
8 exhibits may not be clean copies; that is, they have counsel
9 notations. We will, in providing the final copy to the
10 Board and the parties, provide clean copies.

11 A Page 11 means the eleventh page in?

12 Q There is no numbering of the pages. It's the
13 eleventh page in; that's correct.

14 A Yes.

15 end #6
16 Joe flws

7-1-Wal

1 Q Now there appears to be an entry for March 29th,
2 question mark March 30th, is that correct? You are on
3 the same entry I am?

4 A Yes, the upper right hand corner, I think so.

5 Q Now, for Items 1 and 2, that is your schedule,
6 Mr. Dieckamp's schedule, for the morning and early afternoon
7 of March 29th, is it not?

8 A Well, it says HE at 10:45 airport. Whatever
9 that means.

10 Q That would be about the time you were leaving
11 Parsippany to travel to the site, is it not?

12 A I think that would have been a reasonable time,
13 yes.

14 Q And the 1:00 senators briefing, that is your
15 schedule for the early afternoon, is it not?

16 A I don't recall it as being quite as early as
17 1:00. But again, whatever this says.

18 Q These have been identified as Mr. Keaton's notes.
19 Did you discuss your schedule with Mr. Keaton at any
20 time in the morning of March 29th?

21 A I have no recollection of that.

22 Q I would like for you to review for a moment,
23 ignoring the extraneous remarks which are -- which you
24 may have on your copy. Of Item 3, the sequence of events
25 which appears on Page 11 and 12, and the present status

1 notation, which appears on page 13.

2 A Page 13, you say?

3 Q Page 11, 12 and 13. Through the top of 13.

4 A Yes.

5 Q Now, the first -- Item 3, which continues through
6 page 12 is a sequence of events for occurrences on March 28,
7 is that correct?

8 MR. BLAKE: Could you repeat the question please,
9 Ms. Bernabei?

10 BY MS. BARNABEI: (Continuing)

11 Q Yes. The sequence of events, or SOE which
12 appears from midway point on page 11, continuing into
13 page 12, there appears to be a sequence of events for
14 March 28th, is that correct?

15 A Well, it looks like the -- I have a hard time
16 making it out, but it looks to me like page 11, which is
17 labeled, Sequence of Events, provides some early sequence
18 of events.

19 Page 12 looks to me a little more like a kind
20 of summary attempt -- attempt to summarize the status of
21 something, not necessarily the sequence of events.

22 Q Well, isn't the last entry in that page finally
23 seven to eight p.m., had good vacuum, high level in --

24 A A pump started.

25 Q A pump started. Doesn't that indicate what

1 occurred at approximately 7:30 p.m., on March 28th?

2 A I guess it does. It would jive with that.

3 Q That is when the reactor coolant pump was
4 finally started in the evening of March 28th, is that
5 correct?

6 A Yes.

7 Q The present status, which follows on, appears
8 to be present status at some time after the sequence of
9 events, is that correct?

10 A Ms. Bernabei, I don't know when it is, but it
11 is the next page.

12 Q It follows on the events of March 28th, does it
13 not? I am just talking about now, as it is laid out --

14 A It follows on after the 7 to 8 p.m. entry, which
15 because of the relationship to the pump, seems to be
16 referring to March 28th; when it says present status, I
17 don't know what date that is.

18 Q Now, did -- assuming for the moment these are Mr.
19 Keaten's notes, did Mr. Keaten at any time communicate the
20 information under Item 3, sequence of events, and present
21 status to you?

22 A I have no recollection of it. My notes indicate
23 talking to Bob Keaten on the phone on the 30th, but I have
24 no notes from the 29th, so I just don't know.

25 Q My question to you is a different one: Do you

1 remember Mr. Keaten communicating the information contained
2 under Item 3, Sequence of Events and Pressure Status to you
3 at any time?

4 A At any time?

5 Q At any time. The specific information contained
6 on these three pages.

7 A I have no recollection of it. I have a hard time
8 coping with, 'at any time,' but I have no recollection of
9 Keaten talking to me about these specific notes.

10 Q Now, your notes of March 30th do not indicate
11 the specific information contained in these three pages,
12 do they?

13 A No, it does not.

14 Q Now, I would like to refer you to Mr. Keaten's
15 testimony, which is that he did communicate the information
16 contained in these three pages; that is, the sequence of
17 events and present status to you.

18 A On what day?

19 Q He puts it on March 30th. Do you have any
20 memory of any communication of this information to you on
21 any date?

22 A My notes reflect a telephone conversation with
23 Bob Keaten on the afternoon of March the 30th. I have no
24 other awareness.

25 Q And your notes do not reflect the information

1 contained in these three pages, is that fair to say?

2 A No, they do not.

3 Q And you do not remember any other conversation
4 with Mr. Keaten in which he communicated this particular
5 information, sequence of events and present status to you?

6 A Again, you mean at any time?

7 Q Right.

8 A Again, I have difficulty coping with that
9 question, because I have talked to Bob Keaten many times
10 over the last five years.

11 Q No, I am asking now for your independent
12 recollection.

13 A I think I can be absolute in saying that I never
14 remember hearing Bob Keaten sit down and talk with me about
15 these notes on these pages.

16 Q Now, did he talk to you about the information
17 contained in those notes on those pages, whether or not
18 in those specific words. That is, the sequence of events
19 and the present status?

20 A I am not trying to be difficult, but I have several
21 levels of problems.

22 Q No, I am asking you. You don't -- if you don't
23 understand the question --

24 A First, I have difficulty in reading the notes
25 and knowing exactly what they say.

1 Q Okay. That is fine. We can take a recess to
2 allow you to do that, and try to get you the best copy.
3 Would you like to do that, Mr. Dieckamp?

4 JUDGE SMITH: I am glad that came up, because
5 I was wondering if Mr. Keaten's notes are going to play
6 a large role in this hearing, there should be a stipulated
7 typed copy of them.

8 MS. BERNABEI: We have no problem with that.
9 I think it would be preferable also to have the original
10 available, since we will be questioning Mr. Keaten on the
11 original.

12 JUDGE SMITH: That may be, but there is no need
13 to struggle with this imperfect information.

14 MS. BERNABEI: I understand.

15 JUDGE SMITH: So the question is still pending.
16 I understood that he answered it once, but you are asking
17 him to try again.

18 MS. BERNABEI: That is right. I am asking him
19 not for the specific words of the notes, but the information
20 contained in the notes. If you remember at any time Mr.
21 Keaten conveying this information.

22 JUDGE SMITH: Now, are you going to limit it to
23 every bit of it, or just generally the subject matter.

24 MS. BERNABEI: Not generally the subject matter.
25 The information contained in the notes. That is, the

1 sequence of events and present status of the reactor.

2 JUDGE SMITH: Well, unless you -- all right,
3 let him answer, and then we will see what the scope of it
4 really is.

5 WITNESS: My other problem in answering that
6 question that as time goes on, these kind of parameters

7 --

8 MS. BERNABEI: I would like an answer.

9 JUDGE SMITH: Wait a minute, because I don't
10 believe that this is a question that can be answered with
11 a simple yes or no.

12 If I were in his position, I don't know how
13 I could conceivably answer that yes or no, without either
14 a lengthy explanation on my part, or further information
15 from you as to the reach of the question.

16 MS. BERNABEI: I think the question is very
17 simple. If there is a problem, I will restate it or re-
18 phrase it.

19 The question is: Does he remember a conversation
20 with Mr. Keaten at any time about the substance of these
21 notes. That is, in sequence of events and the present
22 status of the reactor.

23 JUDGE SMITH: And my difficulty is at just
24 crude glance, there are, perhaps, two dozen items of
25 information, and even more sub-items of information, and

1 the difficulty is, I think that the witness is entitled to
2 know are you talking about all of those items --

3 MS. BERNABEI: Yes.

4 JUDGE SMITH: All of those items, in the exact
5 sequence listed?

6 MS. BERNABEI: That is correct.

7 JUDGE SMITH: You are asking him that. All right.
8 Now, you understand that. Look at all this information, Mr.
9 Dieckamp.

10 MS. BERNABEI: And if that is a problem, I
11 apologize.

12 JUDGE SMITH: That is a big problem, yes.

13 MS. BERNABEI: I am talking about the sequence
14 of events, which is the order of events which I understand
15 occurred on March 28th, and the present status.

16 BY MS. BERNABEI: (Continuing)

17 Q Mr. Dieckamp, were you ever relayed this
18 information in this form by Mr. Keaten, whether in these
19 exact words or substantially equivalent words?

20 A I have no recollection of any conversation with
21 Bob Keaten that in some way reflected this specific set
22 of notes.

23 I am sure that in the first weeks after the
24 accident I must have talked with Keaten on several occasions
25 about his understanding of the sequence of events, but I

1 have no awareness whatsoever of this specific list, the
2 contents of it, the format of it.

3 It does not.

4 Q Doesn't ring a bell.

5 A It certainly does not.

6 Q Okay. Let's focus now on page 13, present
7 status of the reactor.

8 A All right.

9 Q Were you ever told by Mr. Keaten that the present
10 status of the reactor was there was a bubble in the reactor
11 vessel, or apparently reactor vessel, non-condensables
12 in the pressurizer, many or lots, an explosion in the
13 containment, and one thousand cubic feet, and one thousand
14 psi could be a hundred thousand cubic feet. Were you ever
15 given that as the present status of the reactor in any
16 conversation you had with Mr. Keaten in the early days
17 following the accident?

18 A Mr. Keaten, as my notes show, a conversation
19 with him in the early afternoon of March the 30th.

20 Q Do they reflect any of this information, Mr.
21 Dieckamp?

22 A This kind of information is very consistent with
23 what he could have told me at that time.

24 Q Your notes do not reflect this information. I
25 think you have already stated that.

7-10-Wal

1 A That is right. My notes do not reflect this.

2 JUDGE SMITH: Had you completed your answer?

3 WITNESS: (Nods head affirmatively)

4 JUDGE SMITH: There is cross-talk there. And I
5 think you have to guard against that.

6 BY MS. BERNABEI: All right.

7 WITNESS: I don't have any more to add to that.

8 BY MS. BERNABEI: (Continuing)

9 Q I assume that. On page 11, the first two items,
10 Items 1 and 2, that was not Mr. Keaten's schedule for
11 that day, at least insofar as you know, is that correct?

12 A What was on Mr. Keaten's schedule?

13 Q He wasn't to go to the airport at 10:45 a.m., on
14 March 29th? That is, he didn't go with you to the airport
15 to travel to the TMI site?

16 A I don't know. As a matter of fact, as I think
17 about it, I am not sure whether anybody went along -- took
18 advantage of the available transportation or not. I just
19 do not know.

20 Q Do you know if Mr. Keaten was in the 1 p.m.
21 briefing of the senators, the 1:30 p.m. briefing?

22 A As I sit here, I do not know.

23 Q At least you have no knowledge of the current
24 time that the first two items of Mr. Keaten's schedule
25 for March 29th?

1 A I don't know the purpose of those entries.

2 MS. BERNABEI: I would like to mark for
3 identification TMIA Exhibit 11. It is noted at the top
4 Preliminary Summary, Technical Manpower Buildup, TMI 2
5 Accident Recovery Team, March 28th through April 1, 1979.

XXXX INDEX

6 (Above referenced document
7 is marked TMIA Exhibit No. 11,
8 for identification.)

9 BY MS. BERNABEI: (Continuing)

10 Q Mr. Dieckamp, can you identify TMIA Exhibit 11?

11 A Well, the document I have in front of me says
12 preliminary summary of technical manpower buildup.

13 Q I can represent this came from your files, at
14 least it was represented by GPU to come from your files.
15 The document D-6, HD-5.

16 A I think I may had a copy of this in my file,
17 if that is where it came from.

18 Q And this indicates, does it not, the buildup or
19 the individuals who came to the TMI site starting in March
20 28th and continuing through April 4th 1979; that is, off-
21 site personnel who came to the site?

22 A It has an entry that is said to be that, yes.

23 Q Assuming for the moment that this did come from
24 your file, referring you to page 2, the individuals listed
25 on this page indicate those individuals who were offsite

1 personnel who came to the site on the first day, March 28th
2 1979?

3 A Yes.

4 Q Okay. Page 2 would indicate those individuals
5 who came to the site on March 29th and March 30th, is that
6 correct?

7 A Page 3, you mean?

8 Q Page 3, that is right.

9 Now, it is fair to say that Mr. Keaten is not
10 listed as an individual who came to the site on March 29th
11 or March 30th?

12 A I don't see him listed.

13 Q And you have no other information that he was
14 at the site on March 29th?

15 A As I sit here, I have no information.

16 Q Now, at some point you took upon yourself the
17 responsibility to have offsite technical support come to
18 the site to analyze the accident, is that correct?

19 A That is correct.

20 Q You began those efforts soon after the accident,
21 on March 29th and March 30th, is that correct?

22 A I began those efforts most likely late in the
23 morning on the 30th, after first hearing about the radiation
24 release, and then those efforts accelerated significantly
25 after I was informed about the hydrogen explosion.

1 Q Now, at the time you began to call people to come
2 to the site, you determined you would call someone from
3 EPRI, is that correct?

4 A Yes, I did.

5 Q And you spoke to a Mr. Culler, is that correct?

6 A I am not sure exactly who I spoke to, but that
7 -- it could well have been Mr. Culler.

8 Q And assuming it was Mr. Culler, or whoever it was
9 at EPRI, you spoke to them about sending a team of
10 technical personnel to assess core damage, is that correct?

11 A I don't know whether I said it that way the
12 first time. I was knowledgeable about the EPRI people,
13 because I had gotten to know them from working on the EPRI
14 Research Advisory Committee.

15 I think in my original discussions with people
16 like Dr. Culler, I more or less said: I don't know what
17 we are going to have to do, but I think we need people
18 with more fundamental understanding so that we can cope
19 with whatever comes up.

20 End 7.
21 MS fols.

22

23

24

25

26

Sim 8-1

1 Q Do you remember setting up four tasks that you
2 wished to complete, one of which you asked EPRI to focus
3 on?

4 A By the time Saturday afternoon came around ---

5 Q No, I am talking about the early conversations.

6 A No. It was when you make mention of four tasks,
7 I did outline four tasks to the outside people who we
8 subsequently called the Industry Advisory Group and the first
9 meeting with them about -- oh, I would say 4 to 5 o'clock
10 in the afternoon of the 31st.

11 Q Now did you mention in your conversation with
12 Mr. Culler prior to that meeting that you wised EPRI to
13 perform one of those tasks, that is core damage assessment?

14 A I don't have a recollection of that, of having
15 said that Mr. Culler. I think that it is true that as it
16 developed on Saturday, that task indeed fell to I think
17 Dr. Zebroski.

18 Q Do you remember telling Mr. Culler, or giving
19 Mr. Culler an assessment, your assessment of the core damage
20 at TMI at the time you spoke to him?

21 A Again, when I spoke with Mr. Culler, and I
22 think this is very likely, on the afternoon of Friday the
23 30th after I had become aware of the postulated hydrogen
24 explosion, I don't know that I was able to give him an
25 assessment of core damage. I am certainly willing to believe

Sim 8-2

1 that the conversation included or involved some recognition
2 that if the spike were indeed hydrogen that it would have
3 to imply significant damage to the core.

4 Q Let me ask the question again. Did you give
5 Mr. Culler in this first conversation with him your assess-
6 ment of core damage, whatever that may be?

7 A I have trouble with the word "assessment" because
8 that sounds like I had some studied result, and I don't think
9 that would be a fair characterization of what I knew at that
10 time.

11 Q Did you give him your opinion on the extent of
12 core damage?

13 A Recognizing that I don't have a direct recollection
14 of that conversation, I am willing, however, though to
15 believe that in that conversation later or in the afternoon
16 or early evening of Friday the 30th that I must have
17 expressed concern about the implications for core damage,
18 if there were indeed a zirconium water reaction. I think
19 that had to be part of the growing awareness of the problem
20 at that time.

21 Q Did you state to him that significant core
22 damage was apparent at Three Mile Island in your first
23 conversation with Mr. Culler?

24 A If you are searching for those specific words,
25 I don't know whether I used them or not.

Sim 8-3

1 Q Did you state to him the sense of those words,
2 a serious or significant core damage, whether or not you
3 used those specific words?

4 A Again, I don't know what words I might have used.

5 Q I am asking you now for something different,
6 Mr. Dieckamp. I am asking you for the sense of the words.
7 Did you indicate to him that you believed there was signifi-
8 cant or serious core damage at Three Mile Island the first
9 time you talked to him?

10 A What I have said this morning ---

11 MS. BERNABEI: Judge Smith, I would request that
12 the witness give me a yes or no answer. I think it is
13 obviously a question that is amended to that. If he needs
14 to explain the answer he is free to do so. I think it is
15 amenable to a yes or no answer.

16 JUDGE SMITH: Okay. Let's have the question
17 exactly and specify the time and the persons and then we
18 will see if it calls for a yes or no answer. But, generally
19 speaking, it is very hard to give a yes or no answer when
20 it went into a question that said the sense of. Necessarily
21 he is going to have to explain it.

22 MS. BERNABEI: I changed the question.

23 JUDGE SMITH: All right. Let's go to the person,
24 the time and the actual question.

25 BY MS. BERNABEI:

Sim 8-4

1 Q Did you state to Mr. Culler in your first conver-
2 sation with him that you believed there was serious or
3 significant core damage at TMI?

4 JUDGE SMITH: And that first conversation being?

5 MS. BERNABEI: On March 30th.

6 THE WITNESS: I am not trying to be difficult.
7 I have difficulty saying yes or no simply because I don't
8 know that you and I share the same understanding of the
9 words "significant core damage." I have said and I am willing
10 to believe ---

11 MS. BERNABEI: Wait, Mr. Dieckamp, hold on a minute.

12 JUDGE SMITH: Wait a minute.

13 MS. BERNABEI: If he can answer it yes or no,
14 he is free to explain whatever he would mean by those words.

15 JUDGE SMITH: Let's accept your definition of
16 significant core damage, whatever it might be, and not
17 hers. And with that idea in mind, would you state that.

18 THE WITNESS: Then I think I probably conveyed
19 that to Dr. Culler in the sense of the difficulty and the
20 need for assistance. It was certainly something other than
21 trivial.

22 BY MS. BERNABEI:

23 Q So the answer is yes?

24 A In my definition of significant core damage, the
25 answer is yes.

Sim 8-5

1 Q Did you use the words "significant core damage"?

2 A Ms. Bernabei, I don't know whether I did or not.
3 I may have, but I can't tell you that I did.

4 Q I believe on page 11 of your testimony you speak
5 about your familiarity in the days after the accident with
6 interviews conducted of operators; is that correct?

7 A Oh, the testimony?

8 Q That is correct.

9 A Yes.

10 Q And those would be the interviews that were
11 conducted in part by Mr. Long and Mr. Repert of GPU?

12 A The early interviews, and I am not able to
13 categorize them for you in terms of some specific list or
14 some specific activity, but they were the ones that became
15 available for me to see.

16 Q It is fair to say that Mr. Long conducted some
17 of those interviews and he was put in charge of that portion
18 of the investigation?

19 A I think as time went on over the first few days
20 that became true, right.

21 Q Now did you review portions of the interviews
22 or portions of any report Mr. Long put out based on these
23 interviews prior to public release?

24 A I did not review portions of interviews before
25 they were released.

Sim 8-6

1 Q Did you review portions of any report Mr. Long
2 may have compiled based on those interviews?

3 A I reviewed portions of or I reviewed reports
4 that Mr. Long was producing that did or may well have included
5 material from interviews, yes.

6 Q And which were in fact based in part on interviews,
7 at least in part on those interviews?

8 A Yes.

9 JUDGE SMITH: Does your question follow through
10 on the time prior to release? Is that what you intended?

11 MS. BERNABEI: That is correct, prior to public
12 release.

13 JUDGE SMITH: Did you understand that?

14 THE WITNESS: Yes, I did. And my answer was that
15 I did not review or approve any interviews prior to their
16 release. With respect to reports, I was involved in the
17 review of sequence of events reports and things of that
18 nature prior to their release.

19 BY MS. BERNABEI:

20 Q And it is fair to say that you gave certain orders
21 or directions to Mr. Long and other investigators, GPU
22 investigators to ensure that you and other management would
23 review and approve any report prior to public release? It
24 is those instructions that were given to Mr. Long?

25 A I have trouble with the "any report" part of

Sim 8-6

1 that question.

2 Q I am talking now about Mr. Long's operator
3 interviews and reports based on those interviews in the
4 immediate aftermath of the accident, the ones which I
5 believe you are referring to at least in part, on page 11
6 of your testimony. Are you with me on that?

7 A I am with you on page 11 of my testimony, yes.

8 Q Okay. I thought we got to the point where you
9 said you were familiar with certain operator interviews
10 conducted by Mr. Long or those under his supervision; is
11 that correct?

12 A I availed myself of early operator interviews. I
13 don't restrict it to Mr. Long one way or the other.

14 Q Okay. I am pulling away from that for the moment.
15 That includes a portion of Mr. Long and people under his
16 supervision, their interviews, does it not?

17 A It may well have.

18 Q You don't know?

19 A I don't know explicitly because I have not made
20 a list that says which interviews came from whom at what
21 time and by what means. I am aware that some of the earliest
22 interviews Mr. Long was not involved in and later interviews
23 he was involved in. My testimony doesn't draw any distinction
24 there one way or the other with respect to Mr. Long.

25 Q So it is fair to say that some of the interviews

Sim 8-7

1 to which you referred were ones under Mr. Long's supervision
2 or which he conducted?

3 A It may well have been.

4 Q Speaking now to your familiarity with Mr. Long's
5 interviews which I think you expressed you had, did you give
6 a direction to Mr. Long that he was at any time in the
7 aftermath of the accident, that he was not to release any
8 report based on those interviews without your review and
9 approval?

10 A I am aware of the transcript that was introduced
11 into my deposition that indicates ---

12 Q Mr. Dieckamp, would you answer the question
13 first. I didn't ask you about a transcript.

14 Judge Smith, I ask the witness to focus on the
15 specific question.

16 JUDGE SMITH: Well, yes. You will have the
17 appropriate relief. I would like to let him finish what
18 he is saying and let's see if that isn't responsive. Now
19 if that is not responsive, then we will see what relief you
20 are entitled to have.

21 MS. BERNABEI: I didn't ask him about any
22 transcript. I asked him about any direction he knows about
23 to Mr. Long that he, Mr. Dieckamp, should review and approve
24 any report.

25 JUDGE SMITH: Right. And then I don't know if

Sim 8-8

1 he is answering it or not because he is alluding to a trans-
2 cript and you asked him about his awareness, and let's find
3 out if he is aware.

4 MS. BERNABEI: I think it is amenable to be a
5 yes or not answer.

6 JUDGE SMITH: Can you answer it yes or no? If
7 you can, you should answer it yes or no.

8 THE WITNESS: The difficulty with the yes or no
9 answers to me, Judge Smith, are that the questions imply
10 a lot broader participation than I think is appropriate or
11 what is accurate, and a yes or no answer in my mind is
12 misleading in that regard. That is why I hesitate about
13 yes or no answers.

14 MS. BERNABEI: It seems to me that is exactly
15 the kind of thing his counsel can clear up on redirect.

16 JUDGE SMITH: Right. If you give your yes or
17 no answer and if you feel having done that that further
18 explanation is necessary, there are several courses available
19 to you, and that is explain then or, if you want to consult
20 with counsel later, you can. But one way or the other you
21 will be assured that you have a chance to explain all of your
22 answers.

23 It is better, in my view, that the answers be
24 explained at the time they are given. Now with that in mind,
25 can you answer yes or no?

Sim 8-9

1 Do you want to give him the questions again?

2 THE WITNESS: Yes, please.

3 BY MS. BERNABEI:

4 Q Do you remember the question?

5 A Once more.

6 Q Did you give a direction to Mr. Long in the
7 course of any interviews he was conducting or reports he
8 was compiling in the aftermath of the accident that you,
9 Mr. Dieckamp, were to review and approve any such reports
10 that were publicly released, prior to their public release?

11 A Based on that one transcript, the answer is yes.

12 Q Did you ever give any instructions to Mr. Long
13 that the investigation or inquiry he was conducting was to
14 be contained?

15 JUDGE SMITH: Was to be contained?

16 MS. BERNABEI: Yes.

17 JUDGE SMITH: Contained in scope, is that what
18 you mean?

19 MS. BERNABEI: Well, I am going to ask about
20 the "apparently."

21 JUDGE SMITH: Whose words are you using now?

22 MS. BERNABEI: Mr. Long's.

23 THE WITNESS: Could you give me the sentence
24 that includes that word?

25 MS. BERNABEI: Yes. Well, let me just ask you

Sim 8-10 1 the question, and we are talking now as to scope of the
2 investigation.

3 Did you give Mr. Long or the group of individuals
4 working under his supervision any direct orders to keep his
5 investigation contained?

6 THE WITNESS: Again, the one transcript, Mr. Long
7 uses that characterization of my instructions. The purpose
8 of that instruction was to make sure that that investigation
9 had the benefit of review prior to release, and that is the
10 only occasion that anyone has ever brought to my attention
11 of that nature.

12 BY MS. BERNABEI:

13 Q So it is fair to say you did give him an instruc-
14 tion to keep it contained in the sense that you wished to
15 review any report prior to its public release?

16 A With respect to that specific report, Mr. Long
17 testifies to that effect, yes.

18 Q Okay. And that is your understanding and belief
19 as well; is that correct?

20 A I have no independent recollection of that. I am
21 going only on the basis of that transcript of Mr. Long's
22 statement.

23 JUDGE SMITH: All right. So that was the nature
24 of your answers. You have accepted Mr. Long's characterization.

25 THE WITNESS: I have no independent knowledge

Sim 8-11

1 of my own. I accept what Mr. Long has said, and the
2 occasion upon which he said it, the context was one within
3 which he said it.

4 MS. BERNABEI: I would like to mark for
5 identification as TMIA Exhibit 12 ---

6 JUDGE SMITH: Well, what do you believe to be
7 the case, Mr. Dieckamp, from everything that you know?
8 In the first place, what do you believe to be the case?

9 THE WITNESS: When I look at the occasion and
10 what is in the Long transcript, it appears to me that those
11 of us that were reviewing this material, and this included
12 myself and Jack Herbein, we were very concerned that the
13 material being pulled together would be accurate and that
14 we could identify the sources and be very clear about the
15 sources of the information.

16 We were under great pressure to get this material
17 out and we gave instructions that said don't use any
18 conjectures and use only things that you can show and
19 demonstrate from objective facts and then we are going to
20 release it immediately. But in the meantime, keep it
21 contained until we have had a chance to review it.

22 JUDGE SMITH: Contained then means contained
23 within house rather than contained in scope; is that how
24 you understood it to mean?

25 THE WITNESS: Yes. I think it meant do not

Sim 8-12

1 distribute.

2 BY MS. BERNABEI:

3 Q Do not distribute prior to your approval and
4 review; is that correct?

5 A That is right.

6 Q Did you make any changes to any report which
7 Mr. Long prepared prior to its public release?

8 A No.

9 Q Are you certain of that?

10 A I can think of none that I have made.

11 MS. BERNABEI: I would like to mark for identifi-
12 cation as TMIA Exhibit 12. The document number on its
13 cover is TM-0694. It appears to be a transcript of the
14 Robert Long conversation on April 12th, 1979 with Mr. Dubiel
15 Mr. Seelinger, Mr. Hilbish and Gary Miller.16 JUDGE SMITH: Well, before you proceed with
17 your questioning, give us a chance to catch up with what
18 is happening here.

19 (Pause.)

20 (The document referred to was
21 marked TMIA Exhibit No. 12
22 for identification.)23 JUDGE SMITH: Do you need the front page of this
24 document?

25 MS. BERNABEI: That only shows the source which

INDEXXXXXX

Sim 8-13

1 was the NRC. I think that authenticates it if there is
2 some question about it.

3 If there is no problem with the other parties,
4 I have no problem with removing it.

5 JUDGE SMITH: Are you going to identify it
6 by document number? How have you identified this document?

7 MS. BERNABEI: It is document TM-0694 which
8 is a transcript of an April 12th, 1979 interview by Mr. Long
9 with Mr. Dubiel, Mr. Seelinger, Mr. Hilbish and Mr. Miller.

10 JUDGE SMITH: All right, that is fine.

11 THE WITNESS: What was the question?

12 MS. BERNABEI: There is no pending question. We
13 are just letting everyone read it for a minute.

14 (Pause.)

15 JUDGE SMITH: Well, I don't think we should
16 take the time to go all the way through it.

17 MS. BERNABEI: Oh, no. I am referring to page
18 4 of the exhibit, which is page 3 of the actual transcript,
19 and specifically the portion in the middle of the page
20 referring to individual three. It starts out "Without that,"
21 and the specific portion about keeping it contained appears
22 at the end of that entry.

23 (Pause.)

24 MR. BLAKE: I believe in fact it is the following
25 entry, which is the Long entry, rather than individual three.

Sim 8-14

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MS. BERNABEI: That is correct.

(Pause.)

BY MS. BERNABEI:

Q Mr. Dieckamp, TMIA Exhibit 12 is the transcript to which you referred; is that correct?

A Yes.

Q And the portion which I specifically directed your attention, and I will read it, is, is it not, "And I just got direct orders from Dieckamp that says I have got to keep that contained and not give it to anybody until we get their approval"? Is that correct? I am just reading it now into the record.

A Yes, that is what it says.

Q It appears there were direct orders from you to Mr. Long in this regard; is that correct?

A In this regard, that is right. He says there is. I have no recollection of it, but he says there was.

end Sim
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#9-1-SueT

1 JUDGE SMITH: Mr. Dieckamp, didn't you say that
2 that is likely to be the case?

3 WITNESS DIECKAMP: Yes. I'm willing to agree
4 that it's -- I'm not challenging Mr. Long's statement at
5 the time.

6 BY MS. BERNABEI: (Continuing)

7 Q Did you have any role in choosing who of site
8 personnel were to be interviewed in the course of Mr.
9 Long's inquiry?

10 A None whatsoever.

11 Q And you today do not know if you authorized or
12 directed any changes in Mr. Long's report?

13 A What report are you referring to?

14 Q Any report he issued based on these interviews?

15 A In what time period?

16 Q The aftermath of the accident, prior to, say,
17 July of '79?

18 MR. BLAKE: Ms. Bernabei, to make -- can we just
19 say the report that is under discussion here, or what Mr.
20 Dieckamp now believes was under discussion here?

21 MS. BERNABEI: No, because I think there may
22 have been several different editions or drafts of this.

23 BY MS. BERNABEI: (Continuing)

24 Q Did you at any time edit or authorize or direct
25 changes to any report prepared by Mr. Long based in part on

#9-2-SueT

1 operator interviews?

2 A I have no awareness of changing any report
3 authored by Mr. Long. Mr. Long I think provided material
4 to me for my testimony before the Hart Committee in the latter
5 part of April of '79. I couldn't suggest that I did not edit
6 that, but of any report of Bob Long that he authored and
7 issued I have no knowledge of me changing anything in it.

8 Q Do you know today what interviews conducted in
9 the course of -- what operator interviews conducted in the
10 course of the Long inquiry or the GPU inquiry you were
11 familiar with prior to sending your mailgram to Congressman
12 Udall?

13 A I do not have a list that tells me which ones I
14 saw and which ones I did not see.

15 Q Is it fair to say that it's likely you saw most
16 of the interviews that were conducted prior to May 9th?

17 A In the early days, the first week or two or three,
18 I think I saw essentially all of the interviews that became
19 available. As time went on, I think my immediacy with those
20 matters began to diminish. I just can't tell you exactly
21 which of the interviews in that time period I did see and
22 which I did not see.

23 I do not have a list of --

24 Q Are you familiar with an interview of Mr. Faust
25 conducted on April 6th, 1979? It appears in Joint Mailgram

#9-3-SueT

1 Exhibit 1-C, Item 8?

2 A I think I saw an early interview of Craig Faust.
3 If that is the first one of Craig Faust, then that very
4 likely is the one that I think I remember.

5 Q Now, is it fair to say that Mr. Faust in his
6 interview indicates, does he not, that he believes -- at
7 least, he gives the impression or indication that he be-
8 lieved the pressure spike indicated a real increase in
9 pressure at the time it occurred?

10 A I recall him saying that. Yes.

11 Q Okay. And there is no indication in his inter-
12 view that it was interpreted other than as a real increase
13 in pressure, or that he interpreted it other than a real
14 increase in pressure?

15 A My recollection of the Faust interview is that
16 he remembers, or he states that he thought that the pressure
17 spike was real. He as an individual. To my knowledge, he
18 does not speak about anyone else's conclusions or impres-
19 sions.

20 Q Now, assuming that to be the case, do you not
21 consider this some evidence that the pressure spike was
22 properly interpreted as a real increase in pressure at
23 the time it occurred? That is, at least by Mr. Faust as
24 reflected in his interview of April 6th?

25 A Oh, I read that to mean that Craig Faust believed

#9-4-SueT

1 that the pressure spike was real.

2 Q Would it not also indicate that he believed it
3 to indicate an explosion of some sort? That is, the pres-
4 sure spike to 28 psi?

5 A I don't recall whether or not he used the word
6 "explosion." If he did, he did. But, as I sit here I just
7 don't recall whether he said that or not in his interview.

8 Q Is it fair to say that the fact that he under-
9 stood it as a real increase in pressure was an understanding
10 in some respects of the significance of the pressure spike?

11 That is, that it was not due to an electrical
12 malfunction but was a real increase in pressure to 28 psi?

13 A Well, I already said that I accept his statement
14 that he thought it was real. I'm not able to go beyond
15 that in terms of any significance that he might have ascribed
16 to it.

17 In fact, I don't read anything in his -- I don't
18 think I read anything in his deposition that goes beyond
19 a simple comment that it was real. I don't --

20 Q Did he say that he believed it was -- that they
21 had some sort of an explosion because that's what it looked
22 like, shock waves?

23 MR. BLAKE: Objection. Please read the exact
24 Faust statement before you hypothesize such a question which
25 has no factual basis. That is a mischaracterization of this

#9-5-SueT

1 interview.

2 MS. BERNABEI: I don't think it is. And if Mr.
3 Blake wouldn't get so excited, I have no problem with re-
4 peating the question. I think he is way overexcited what
5 the question would warrant.

6 BY MS. BERNABEI: (Continuing)

7 Q I asked, Mr. Dieckamp, do you know that he stated
8 in that interview that he believed that we had probably some
9 sort of explosion because that's what it looked like, shock
10 waves.

11 Do you remember that in Mr. Faust's interview?

12 MR. BLAKE: Now --

13 WITNESS DIECKAMP: I would be happy to look at
14 the interview and see what I think it says.

15 BY MS. BERNABEI: (Continuing)

16 Q I'm quoting the exact words. Do you have some
17 reason to believe that that's incorrect?

18 MR. BLAKE: I have some question that it's not
19 correct. I'm also looking at the interview.

20 JUDGE SMITH: Well, it certainly should be
21 resolvable quickly.

22 MR. BLAKE: Yes, sir, that's what I'm proposing.

23 JUDGE SMITH: Can't one of you read the exact
24 words?

25 MS. BERNABEI: That's what I did. I read the

#9-6-SueT

1 exact words. And that's why I sort of find it astounding
2 that Mr. Blake is having this problem.

3 JUDGE SMITH: You are reading the exact words
4 from the Faust interview?

5 MS. BERNABEI: Yes. On Page 5 of that inter-
6 view: What about the reactor containment building spike?
7 Faust: We had probably had some sort of explosion, because
8 that's what it looked like, shock waves.

9 Those are the exact words on Page 5.

10 MR. BLAKE: I agree with those words. That's
11 hardly "I believed that we had a pressure spike" or that
12 "we had an explosion." Those are the words that don't
13 appear there which were in each of her questions.

14 MS. BERNABEI: I will restate the question to
15 take care of whatever problem there is.

16 BY MS. BERNABEI: (Continuing)

17 Q We had probably had some sort of explosion.
18 Do you know if Mr. Faust said they had probably had a type
19 of explosion which he analogized as to shock waves?

20 Do you know that his interview contained that
21 information?

22 A Yes, I do.

23 Q You don't believe there is some indication that
24 he understood the cause of the pressure spike, that is due
25 to a hydrogen burn or explosion?

#9-7-SueT

1 A I see no reference in Mr. Faust's interview to
2 hydrogen.

3 Q Regardless of whether the words are there,
4 wouldn't that indicate that he had an understanding of the
5 cause, that it was due to an explosion of noncondensable
6 gases or hydrogen?

7 A It does not indicate that to me.

8 MR. BLAKE : Can we pause here and just read in
9 the portion of the Faust statement so there will be no doubt
10 in the record?

11 MS. BERNABEI: I've already read it in. I'm
12 going to really object to Mr. Blake's continuous interference.
13 He has not shown that I have misrepresented in any respect
14 the statement.

15 If he wants to rehabilitate Mr. Dieckamp on re-
16 direct, he is free to do this. I think this is nothing more
17 than obstruction.

18 JUDGE SMITH: I really don't believe it is neces-
19 sary for you to do that. Mr. Dieckamp is addressing the
20 question as he sees it. Unless you are concerned that she
21 is -- if -- are your questions now based upon the language
22 that you read?

23 MS. BERNABEI: That's correct.

24 JUDGE SMITH: And nothing else?

25 MS. BERNABEI: That's right.

#9-8-SueT

1 JUDGE SMITH: All right. We can judge for ourself
2 whether that is germane and relevant.

3 I am concerned that you asked this question
4 several different ways. And -- I guess there is no problem.

5 MS. BERNABEI: If I could have a moment to find
6 one of the Joint Mailgram exhibits.

7 (Pause.)

8 JUDGE SMITH: Ms. Bernabei, would this be a good
9 time to break for lunch?

10 MS. BERNABEI: That would be fine.

11 MR. BLAKE: I wonder if we could get just an
12 estimate now of the remainder of Ms. Bernabei's questions
13 plus the other parties?

14 The reason that I ask for that estimate is that
15 there was a potential for Mr. Illjes yet this afternoon,
16 and I would need to give him some notice at the plant to
17 be able to come.

18 MS. BERNABEI: I would anticipate an hour and a
19 half to two hours more.

20 JUDGE SMITH: So I don't think we will be getting
21 to Mr. Illjes because we will have examination by Mr. Au,
22 Mr. Goldberg. It doesn't look like it.

23 We will return here at 2:10.

24 (Whereupon, the hearing is recessed at 12:55 p.m.,
25 to reconvene at 2:09 p.m., this same day.)

#9-9-SueT

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

(2:09 p.m.)

JUDGE SMITH: Are you ready? It's a few minutes earlier than the designated time. Does anyone object if we proceed?

(No reply.)

Let us proceed, then.

Whereupon,

HERMAN M. DIECKAMP

resumed the witness stand as a witness called by and on behalf of the Applicant, Metropolitan Edison Company, and having previously been duly sworn, was further examined and testified as follows:

CROSS EXAMINATION

BY MS. BERNABEI: (Continuing)

Q Mr. Dieckamp, were you familiar at the time you sent your mailgram on May 9th with what has become known as the Bubba Marshall notes? That is, the chronology of Mr. Marshall's activities, or excuse me, of Mr. McGovern's activities as taken down by Mr. Marshall?

A I don't think so.

Q I would like to show you what appears as a Joint Mailgram Exhibit, Item 1. in Joint Mailgram Exhibit 2-C.

(Ms. Bernabei is showing the witness a document.)

#9-10-SueT 1

MS. BERNABEI: Does the Board need a copy?

2

JUDGE SMITH: Well, we don't know. I suspect

3

that we might.

4

MR. GOLDBERG: We don't have a copy either. Do
you have your set here?

5

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MS. BERNABEI: No.

7

MR. GOLDBERG: We don't either. So it is a
problem.

8

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MS. BERNABEI: Maybe we can share with Mr. Blake
since he has got his copy.

10

11

JUDGE SMITH: Well, we will have to proceed very
carefully, because we don't have a sufficient number of
copies to provide one to each of the parties as we proceed
so we will have to be very careful.

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MR. BLAKE: I will try to arrange to have another
set of these here tomorrow.

16

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BY MS. BERNABEI: (Continuing)

18

Q Mr. Dieckamp, have you had a chance to review
that document?

19

20

A Portions of it.

21

Q Did you review this chronology that was ap-
parently taken at approximately 3 a.m. on March 29, 1979
prior to sending your mailgram?

22

23

24

A I don't know whether I did or did not.

25

Q Okay. It is in the nature though of the interviews

#9-11-SueT

1 which you did review, is it not? That is, the operator
2 interviews that you refer to in your testimony?

3 A Yes. I did review many operator interviews. I
4 have never said that I reviewed all of them.

5 Q I understand. But this is in the same nature
6 of those you did review, is it not?

7 A In the sense that it's a description of events
8 as a function of time. I guess it's in a similar nature,
9 yes.

10 Q Okay. And it is actually closer to the event
11 than any other interview which currently exists, is it
12 not, having been taken at 3 a.m. on March 29, 1979?

13 A It's very early information. Yes.

14 Q In fact, it's the earliest interview or informa-
15 tion concerning the event which we are concerned with, the
16 pressure spike, is it not?

17 Do you know of any interview earlier than this
18 one?

19 A I don't know of any earlier as I sit here, no.
20 It may be the earliest; I just don't know.

21 Q Referring you now to Page 2. This would indicate,
22 would it not, that Mr. McGovern who apparently dictated this
23 chronology was aware of both the pressure spike and the
24 actuation of the containment sprays at 1:50 p.m. on March
25 28th?

#9-12-SueT

1 A Yes.

2 Q It would also indicate, would it not, that he
3 apparently -- well, he does not question that the pressure
4 spike indicates a real increase in pressure; is that
5 correct?

6 A I don't think he renders a judgment on it one
7 way or the other.

8 Q It's fair to say, however, he does not -- at
9 least within this chronology -- indicate other than it
10 appeared to be a real increase in pressure?

11 A He does not explicitly say it was a real increase.
12 He does not say it --

13 Q He does not explicitly --

14 A -- was not. He says neither. He just says the
15 definite spike, straight up, straight back down.

16 Q In fact, he repeats it twice, does he not?
17 At least, according to these notes or chronology?

18 A Yes, he does.

19 Q And it's fair to say you don't know today whether
20 or not you had this information available to you at the
21 time you sent your mailgram?

22 A I cannot state today with any certainty at all
23 that I did or did not look at this before sending the mail-
24 gram.

25 Q Did you review Mr. Keaten's notes, that is the

#9-13-SueT 1 notes which we have discussed today, at any time prior to
2 sending your mailgram?

3 It is his record of what occurred on March --
4 well, March 28th and the days after the accident?

5 A Are we talking about what we looked at earlier?

6 Q That's correct.

7 A I feel quite certain that I did not see those
8 prior to sending the mailgram.

9 Q Did you discuss with Mr. Keaten licensee's
10 awareness and understanding of the pressure spike at the
11 time it occurred prior to sending your mailgram?

12 A It would be my general belief that I had numerous
13 discussions with Bob Keaten in the time period prior to the
14 mailgram. But I can't tell you specifically what I discus-
15 sed on what day or the like.

16 But there was a general effort underway to
17 deduce the sequence of events and to begin to understand
18 what happened and why. And certainly, the --

19 Q No. Mr. Dieckamp, it was a very --

20 A -- pressure spike was a central part of --

21 Q -- simple question. I --

22 A -- the whole business.

23 MS. BERNABEI: Judge Smith, I would ask that the
24 witness be directed to answer yes or no if he is able.

25 BY MS. BERNABEI: (Continuing)

#9-14-SueT 1

2 Q My question was a very simple question. Did you
3 discuss with Robert Keaten prior to sending your mailgram
4 the information contained in his notes for the accident and
5 immediate aftermath?

6 A I --

7 JUDGE SMITH: Can you answer that yes or no?
8 That is the information contained in his notes?

9 MS. BERNABEI: Yes.

10 JUDGE SMITH: Now, he had already indicated that
11 he had not seen the notes before the -- or, he didn't think
12 he had seen them.

13 But, now you want the information contained in
14 his notes identified as such?

15 MS. BERNABEI: Identified as information avail-
16 able to Mr. Keaten in this period.

17 JUDGE SMITH: But not necessarily identified as
18 information from Mr. Keaten's notes?

19 MS. BERNABEI: That's correct.

20 JUDGE SMITH: Can you answer that yes or no?

21 WITNESS DIECKAMP: Would you give me the question
22 again now, please?

23 BY MS. BERNABEI: (Continuing)

24 Q Yes. Did you speak to Robert Keaten at any time
25 prior to sending the mailgram about the information contained
in his notes for March 28th through March 30th?

#9-15-SueT 1

A I will answer that yes, but I would like to go
2 on and explain that, that I'm sure that conversations with
3 Keaten encompassed the material contained in his notes --

4 Q That wasn't my question.

5 A -- but I can't be sure that it was absolutely
6 everything.

7 JUDGE SMITH: Now that is a fair answer to your
8 question. There is a lot of information in the notes. I
9 don't know how he could answer otherwise.

10 end #9
11 Joe flws

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BY MS. BERNABEI: (Continuing)

1 Q Is it fair to say that you have no testimony --
2 your written prefiled testimony in this proceeding does
3 not indicate that you received that information from Mr.
4 Keaten, either on March 29th or March 30th, is that correct?

5 A My testimony does not make reference to receiving
6 that information from Mr. Keaten.

7 I think my testimony makes reference to a
8 first -- a phone call from Bob Keaten on the afternoon of
9 Friday, the 30th, and I think it includes a mention of
10 -- the notes include the word, 'hydrogen.' That is part
11 -- that is not part of the testimony; it is part of the
12 Answer to Interrogatories.

13 Q But it does not make mention, does it, of
14 receiving the sequence of events, present status of the
15 reactor, on either March 29th or March 30th from Bob
16 Keaten?

17 A No, it does not.

18 Q I refer you to the top of page 12, specifically
19 your testimony that on May 9th you had a clear understanding
20 of the delayed recognition and interpretation of the
21 pressure spike.

22 A Excuse me, my copy is over here. I would like
23 to get it.

24 Q Well, you could perhaps --

25 A I will get it.

1 (Witness walks across room to obtain document)

2 I have it now. Page 12?

3 Q 12.

4 A What was the question again, please?

5 Q On page 12, you indicate, do you not, that on
6 May 9th, the date you sent the Mailgram, you had a clear
7 understanding of the delayed recognition and interpretation
8 of the pressure spike?

9 A Right.

10 Q Now, if I interpret your testimony correctly, on --
11 the basis are stated in that paragraph, as basis for your
12 understanding on May 9th, 1979, is that correct?

13 A Basis of what?

14 Q The basis of that understanding are stated later
15 in that paragraph; that is, for your understanding that
16 there was a delayed recognition or understanding of the
17 pressure spike.

18 A I am having trouble with what you are describing
19 as, 'basis.'

20 Q I am just trying to clarify your testimony, Mr.
21 Dieckamp.

22 A What part would you like to have clarified?

23 Q Getting through the first sentence, and I think
24 what you stated is as of May 9th 1979, you had a clear
25 understanding of the delayed recognition and understanding

1 of the pressure spike.

2 A And interpretation of the pressure spike, yes.

3 Q Is that right?

4 A Yes.

5 Q Now, I think you also state in this paragraph
6 that as of that date you saw no indication that on March
7 28th the pressure spike was properly interpreted as a
8 product of the zirconium of water reaction, is that
9 correct?

10 A Properly diagnosed, yes.

11 Q Now, we are trying to get the sense Mr.
12 Dieckamp, so if one word is different, as long as it is
13 the sense, that is what we are trying to do.

14 A We might as well use the ones that are there.

15 Q This will be introduced in the evidence. I am
16 trying to lay predicate for some of my questions. It
17 also states, does it not, that you had no evidence or
18 no indication on May 9th 1979 that the pressure spike
19 had caused the plant staff to change or adopt a different
20 strategy for bringing the plant to a cold shutdown.

21 A That is right.

22 Q Now, for a moment, sticking with those two
23 last statements, at any time after May 9th, 1979, have
24 you seen any indication that the pressure spike was, in
25 fact, properly diagnosed as a indicator of zirconium

1 water steam reaction on March 28th.

2 A I have not seen any information that I interpret
3 to indicate proper recognition of the hydrogen spike on
4 March 28th.

5 Q Now, have you since that time, since May 9th,
6 1979, to the present, seen any information that would lead
7 you to change your belief as to whether the pressure spike
8 caused the plant staff to change or adopt a different
9 strategy to bring the plant to a cold shutdown?

10 A I have not seen anything to the present that
11 leads me to believe that the Staff recognized the pressure
12 spike and reflected that recognition in their strategy for
13 dealing with the plant.

14 Q Now, are you familiar with the Nuclear Safety
15 Analysis Center Report on the on the TMI-2 accident?

16 A Yes, I am.

17 Q And specifically, the addition, or the initial
18 report which came out in July of 1979?

19 A I am less clear with the various versions of the
20 report, but I am generally familiar with the report.

21 Q It is fair to say that the report in Appendix
22 TH divides the accident into six major phases, essentially
23 describing the thermol hydraulic behavior of the reactor
24 in six different phases on March 28th?

25 A As I sit here, I would not have been able to say

1 it was six.

2 I do know that there is one phase that they
3 call repressurization.

4 Q Regardless of the number of phases, the phases
5 are intended to represent operating modes or strategies
6 employed to bring the reactor to a cold shutdown, is
7 that correct?

8 A I think that was their intent, yes.

9 Q Now, for the moment --

10 A Pardon me, could you help me with what is the
11 time period for that phase?

12 Q Well, I am going to back into that, Mr. Dieckamp.
13 There is, is there not, and I am not talking about your
14 general knowledge of the accident, there is a phase of
15 depressurization a short time after the initiation of the
16 event from about an hour into the event, and for about
17 two and a half hours into the event?

18 A I will accept your characterization. As I said,
19 I don't recall the exact breakdown.

20 Q But somewhere in that ball park?

21 A Again, I accept your characterization.

22 Q And there was a second phase, or another phase
23 which followed, which was initial repressurization effort,
24 is that correct?

25 A Ms. Bernabei, I am depending upon you. I do

1 not recall as I sit here.

2 Q Okay. I would like to refer you to Appendix TH
3 of the NSAC Report issued in July of 1979.

4 A David, do we have a copy of that with us.

5 Q I can share my copy with you.

6 A All right.

7 (Ms. Bernabei walks behind witness chair)

8 JUDGE SMITH: Mr. Dieckamp just referred to
9 Mr. David Lewis in his comment.

10 BY MS. BERNABEI: (Continuing)

11 WITNESS: Is there a question before the house?

12 BY MS. BERNABEI:

13 Q Mr. Dieckamp, referring you now to -- there
14 are certain phases referred to on pages 2 and 3 of
15 Appendix TH, is that correct?

16 A Yes, there are.

17 Q And those are phases, as we were talking about,
18 for operating loads, or strategies during March 29, 1979?

19 A I think that is right.

20 Q Now, Phase I is the initiation of the accident,
21 or the initiation of the trip, is that correct?

22 A The title is Initiation.

23 Q And is that what it describes essentially?

24 That is, the original trip and the --

25 A Yes, it is.

10-7-Wal

1 Q And the second phase is a continued depressurization
2 of phase or mode, extending from out one hour and thirteen
3 minutes, to two hours and twenty-two minutes into the event?

4 A Yes.

5 Q Phase III is initial repressurization, is that
6 correct?

7 A Yes.

8 Q And that occurred in the early morning until
9 approximately 8:27, is that correct?

10 A Right.

11 Q Phase IV is the sustained high pressure injection
12 phase or mode, as described on this page.

13 A Yes, it is.

14 Q And then we go into Phase V, which is an extended
15 depressurization mode, is that correct?

16 A Yes.

17 Q Now, for what period does that extend?

18 A It says seven hours and thirty-eight minutes
19 after the accident at 4:00 a.m., to eleven hours and
20 eight minutes after the accident. 11:08 for convenience
21 translates into 3:08 in the afternoon. Roughly an hour
22 and twenty minutes afer the hydrogen spike.

23 Q Excuse me. You said approximately one hour
24 and eighteen --

25 A Twenty minutes. Well, eighteen, we will take

1 that.

2 Q Now, that then moves us into Phase VI, the
3 repressurization and recovery stage, is that correct?

4 A Yes.

5 Q And that repressurization and recovery phrase
6 starts with the closing of the block valve at 3:08 p.m.,
7 is that correct?

8 A Yes, it does.

9 Q And it ends with the continuous operation
10 of the reactor coolant pump some time in the evening of
11 March 28th, is that correct?

12 A Yes, it does.

13 JUDGE SMITH: Will you tell me what the question
14 is again, the question just before this?

15 MS. BERNABEI: About the beginning of repressuri-
16 zation, and I believe he said that according to this
17 report, repressurization began at 3:08 p.m., with closing
18 of the block valve.

19 JUDGE SMITH: Right. And then when did it end?
20 What was the next question?

21 MS. BERNABEI: I am trying to convert it. About
22 7:50 p.m., with the continuous operation of the reactor
23 coolant pump started on the evening of March 28th.

24 JUDGE SMITH: Were you overlooking Phase V?

25 MS. BERNABEI: Where I say VI.

1 JUDGE SMITH: That is right. You went from
2 Phase III to PHASE VI, not taking into account Phase V.

3 MS. BERNABEI: Well, we noted -- we are going to
4 talk about that in a second.

5 JUDGE SMITH: Okay.

6 BY MS. BERNABEI: (Continuing)

7 Q According to the NSAC Report, it is true, is it
8 not, that repressurization, or that strategy began with
9 closing of the block valve at 3:08 p.m., on March 28th?

10 A I think it is fair to say that EPRI or NSAC
11 chose to break the time period up, starting with the closing
12 of the block valve. It would have been difficult to
13 describe repressurization with the block valve still
14 open.

15 Q Well, in fact, closing the block valve ceased
16 or stopped any depressurization in the system. You would
17 concede that, would you not?

18 A Well, I don't know whether that is right or not.
19 It seems to me that the pressures hang roughly constant
20 for a period of at least an hour to an hour and a half
21 there, so I -- I don't want to argue about it.

22 Q Isn't it, sir, to say the intention of closing
23 the block valve was to repressurize the system to Class XV,
24 and initiate natural circulation?

25 A I don't really know what the intention was.

1 Q I refer you to Appendix TH, page 85. At least
2 the NSAC Report found that that was the intention of closing
3 the block valve, the apparent intention of closing the
4 block valve at 3:08 p.m.

5 A Where?

6 Q Page 85 of Appendix TH, specifically paragraph
7 3.6.1.

8 A The sentence says the apparent intention was
9 to repressurize, yes.

10 JUDGE SMITH: Page 85 is Phase VI.

11 WITNESS: That is what we are talking about.

12 JUDGE SMITH: No, we are not; we are talking
13 about the closing of the relief block valve.

14 MS. BERNABEI: We are talking about repressuri-
15 zation, Phase VI.

16 JUDGE SMITH: All right. It says what it says,
17 that is correct.

18 BY MS. BERNABEI: (Continuing)

19 Q Mr. Dieckamp, if you know, were there not actions
20 taken prior to closing of the block valve to begin a re-
21 pressurization strategy?

22 A Further actions taken after --

23 Q Before. Before. Were there actions taken in
24 a repressurization effort prior to closing of the block
25 valve at 3:08 p.m?

1 A Well, I don't really know.

2 Q Do you know that the heaters in the pressurizer
3 were turned on?

4 A I think there is extensive testimony from
5 Chuastyk that he relates to starting after Miller left for
6 the lieutenant governor's office, and including things
7 like turning on heaters, and what he describes as trying
8 to draw the bubble. I don't recall his testimony, though,
9 as ever identifying closing of the block valve as a major
10 step, particularly to 3:08 closure.

11 Q My question to you is a different one. Do you
12 know, as a fact, not what Mr. Chwastyk says, but as a fact,
13 that -- whether or not the heaters were, in fact, turned
14 on prior to 3:08 p.m., when the block valve was closed.

15 A As I sit here, I don't know that as a fact. I
16 think I have some awareness that heaters may have been
17 turned on before 3:08, but I couldn't testify to that.

18 Q Okay. Do you know whether or not there were
19 efforts, in addition to that, to draw a buggle in the
20 pressurizer?

21 A Well, again, the principal awareness that I have
22 is from looking at Mr. Chwastyk's testimony, and he speaks
23 at length about his desires to draw a bubble in the
24 pressurizer --

25 Q I am not talking about Mr. Chwastyk. I am

1 talking about objective evidence that, in fact, that
2 was done.

3 Do you know whether there were steps taken to
4 draw a bubble in the pressurizer prior to 3:08 p.m?

5 A Well, there are a number of things --

6 JUDGE SMITH: Wait a minute. Where do you get
7 3:08 p.m? I am sorry to interrupt, and I hope I am not
8 hurting your cross examination.

9 MS. BERNABEI: No.

10 JUDGE SMITH: But you are switching from times
11 into the accident to clock times, and every time you do
12 that I have to add, subtract, and go back. And I don't
13 get closing block valves at 3:08 p.m., by any method
14 of arithmetic that you have used so far.

15 End 10.
16 MS fols.

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Sim 11-1

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MS. BERNABEI: I will back up with Mr. Dieckamp.

BY MS. BERNABEI:

Q Phase V is extended depressurization; is that correct? I have just taken your book away from you.

(Pause while Ms. Bernabei approaches the witness with the book for him to look at.)

We now are on page 3 of Appendix TH.

Now Phase V is an extended depressurization period; is that correct, Mr. Dieckamp?

A That is how it is labeled, yes.

Q Okay. Now the time period noted below is from 7 hours and 38 minutes into the accident 11 hours and 8 minutes into the accident; is that correct?

A Yes.

Q And for the Board could you translate that into clock time?

JUDGE SMITH: I can do that.

THE WITNESS: That is three hours.

JUDGE SMITH: Thank you.

BY MS. BERNABEI:

A Okay. So that takes us to 3:08 p.m.; is that correct?

A Right.

Q Now Phase VI, the depressurization and recovery ---

JUDGE SMITH: My difficulty is I understood you

Sim 11-2

1 to say that initial repressurization, to wit, the closure
2 of the pressurizer relief block valve, began at 3:08, and
3 I couldn't ---

4 MS. BERNABEI: Repressurization in the afternoon
5 at 3:08. That is different than the initial pressurization.

6 JUDGE SMITH: Exactly. I know, but nevertheless,
7 I heard you set a closure of the relief valve, the block
8 valve at 3:08, and that is what got me onto this interruption.

9 Perhaps when I reread the transcript I will be
10 wrong, but as I sit here now I believe that you had at one
11 in your cross-examination placed at 3:08 the closing of the
12 relief block valve.

13 MS. BERNABEI: That is correct.

14 JUDGE SMITH: And did that happen?

15 MS. BERNABEI: Yes.

16 JUDGE SMITH: That is where I fall down.

17 MS. BERNABEI: Okay. Let me refer you a little
18 farther in the NSAC reports. Specifically ---

19 JUDGE SMITH: Mr. Dieckamp agrees with you and
20 apparently everybody else understands it.

21 MS. BERNABEI: No, it is confusing. And obviously
22 the Board has not had a chance to review this whole document.

23 On page 85 of Appendix TH.

24 JUDGE SMITH: Okay.

25 MS. BERNABEI: And I will ask Mr. Dieckamp a

Sim 11-3

1 a question.

2 BY MS. BERNABEI:

3 Q This indicates, does it not, in terms of a summary
4 Phase 6, depressurization and recovery, that that began with
5 a closure at 3:08 p.m. on the pressurizer relief block valve?

6 A Yes, but I think the next sentence is meaningful.
7 It says "The apparent intention." I don't really want to
8 argue about that. It is just that it is not black and white.
9 It is the investigators trying to deduce or to find a reason-
10 able place to split this time period up.

11 JUDGE SMITH: I think what my problem is is the
12 fact that the PORV was discovered open and the block valve
13 was closed occurred at 2.22 into the accident.

14 THE WITNESS: Yes.

15 JUDGE SMITH: So then we are talking about a
16 different closure of the block valve.

17 MS. BERNABEI: That is correct.

18 JUDGE SMITH: All right. I am with you now.

19 BY MS. BERNABEI:

20 Q Now it is true, is it not, that this NSAC report,
21 which you and I have before us, that this was compiled based
22 on hard data and indicators from the plant; is that correct?

23 A Yes, that is true. I think NSAC stated that they
24 were very careful to base all of their sequence of events
25 on objective data.

Sim 11-4

1 Q And it is not based in any part on interviews
2 of operators such as other investigations, including GPU's
3 internal investigation? It is not based to any degree on
4 interviews with operational site personnel?

5 A I have difficulty with that in the sense that
6 I am sure they used a lot of operator interviews, but when
7 they come down to their final statements, they say it is
8 based on objective evidence. Is that fair?

9 Q Let me refer you to the forward of this report
10 which appears at small Roman numerals iii, and specifically
11 the fifth paragraph. And this indicates, does it not, that
12 this initial report by intent focuses exclusively on obser-
13 vable aspects of the accident supported by firm reported
14 data? Is that correct?

15 A And the main inference is on the physical course
16 of events which can reasonably be directly inferred or
17 calculated from known data.

18 Q Okay. Doesn't that indicate that they in no
19 part based this report on interviews with operational
20 personnel?

21 A I guess. I was just having trouble saying that
22 they didn't use them at all.

23 Q Do you know if prior to 3:08 p.m. -- and I am
24 going back to my other question when Judge Smith raised
25 this point -- do you know whether or not there were steps

Sim 11-5

1 taken to draw a bubble in the pressurizer?

2 A I don't know for a fact. As I said, I get the
3 impression from the Chuastyk various and sundry interviews
4 that he speaks of undertaking efforts to redraw a bubble
5 starting about the time that Gary Miller left the site to
6 go to the Lt. Governor's office.

7 Q I am talking about objective evidence outside
8 of Chuastyk's interview. Do you have any information outside
9 of Mr. Chuastyk's interviews that steps were taken to draw
10 a bubble in the pressurizer prior to 3:08 p.m.?

11 A No, I don't know of any objective data on that.

12 Q Do you know of any operator interviews which would
13 support that conclusion that after the pressure spike but
14 prior to 3:08 p.m. there were attempts made to draw a
15 bubble in the pressurizer?

16 A No, I am not aware of any.

17 Q I would like to refer you to the McGovern inter-
18 view which I previously referred to, Exhibit 1 of the Joint
19 Mailgram Exhibits.

20 A I have it in front of me.

21 Q Now I would like to refer you specifically to
22 page 2, the entry 1500.

23 A Now we are talking clock time.

24 Q Clock time, right. That would be about 3 p.m.;
25 is that correct?

Sim 11-6

1 A Yes.

2 Q Okay. Now you can read that paragraph. It
3 indicates, does it not, that steps were taken to draw a
4 bubble in the pressurizer prior to closing the block valve?

5 A It says steps were taken prior to closing the
6 block valve?

7 Q Yes. First, let's establish, there is a notation
8 in this paragraph, is there not, that the block valve was
9 closed at a certain point?

10 A Well, this say "about 1500." That is 3 o'clock.
11 Are we talking about the time between 3 o'clock and 3:08?
12 Is that what we are talking about?

13 Q We are talking about the time from the pressure
14 spike to 3:08 p.m. It says "approximately 3 p.m.", is that
15 correct?

16 A Yes.

17 Q Now in that paragraph there is a notation made
18 about closing the block valve, is there not?

19 A Is that RCV-2?

20 Q RCV-2, right, about two-thirds down the paragraph.

21 A It says "By shutting RCV-2 PZR level started
22 to drop again in about five minutes and dropped rapidly to
23 150 inches"?

24 Q Right. There is an indication by shutting RCV-2
25 that the block valve was closed; is that correct in this

Sim 11-7

1 general time period?

2 A Yes, and the drop of the pressurizer level occurs
3 oh, I don't know, it looks like about 10 minutes after 3
4 in the afternoon.

5 Q Okay. Now prior to this notation of shutting
6 RCV-2, is there any indication that efforts were made to
7 draw a bubble in the pressurizer?

8 A Gosh, I don't know. The only thing I know about
9 that is from looking at Chuastyk's testimony, and I don't
10 know what to conclude from this paragraph, by the way. That
11 is the first time I have ever looked at it.

12 Could you help me as to what I should read here
13 in order to tell me the answer to that?

14 Q It says "pressurizer heaters on at this time
15 with RC-R-VT open", is that correct?

16 A Is on at this time, and what time is this time?

17 Q Approximately 3 p.m.

18 A I guess that is what that means.

19 Q That would indicate that the pressurizer heaters
20 were either turned on or were on with the block valve open?
21 That is what that means?

22 A Yes.

23 Q And that would be one step in drawing the bubble
24 in the pressurizer to turn the heaters on?

25 A It would not be one step to turn the heaters on

Sim 11-8

1 with the block valve open.

2 Q To turn the heaters on and later close the block
3 valve would be to draw a bubble in the pressurizer; is that
4 correct?

5 A But I must say that would be a bit illogical. It
6 would make more sense to close the block valve and then turn
7 the heaters on. But, again, I don't know ---

8 Q Despite the fact that you may not have done it
9 that way yourself, is not turning on the heaters and closing
10 the block valve what you do to draw a bubble in the
11 pressurizer?

12 A I think that is right.

13 Q So from these notes one could infer that the
14 operators took steps to draw a bubble in the pressurizer
15 by turning on the heaters and by closing the block valve,
16 is that correct, approximately at 3 p.m. according to these
17 notes?

18 A I have the feeling that we are making very much
19 in terms of time precision on something that doesn't have
20 that precision. Again, what was the question?

21 Q Well, you said you have no objective evidence
22 to indicate when or if steps were taken to draw a bubble
23 in the pressurizer between the time of the pressure spike
24 at 1:50 p.m. and the closing of the block valve at 3:08;
25 is that correct?

Sim 11-9

1 Is that correct, Mr. Dieckamp, that you have
2 no objective evidence of that?

3 A I am not sure that is what I said. I said that
4 I thought I was aware of Chwastyk talks of drawing the bubble
5 in this general time period after Miller leaves. I think
6 my testimony says that I don't see anything after the spike
7 that indicated that people reflected an understanding of the
8 spike in the manner in which they operated the system.

9 I think those are the things that I have said
10 or intended to say.

11 Q Let me ask the question over. Leaving aside
12 Chwastyk's interviews or Chwastyk's statements, do you have
13 any evidence that there was any objective hard data evidence
14 that there were attempts made to draw a bubble in the
15 pressurizer prior to 3:08 p.m.

16 A Well, we seem to have some material here from
17 McGovern that says that some time ---

18 MS. BERNABEI: I would ask that he answer my
19 question. My question elicits a yes or no answer if he
20 has any objective evidence.

21 JUDGE SMITH: You are asking him to decide for
22 himself what is meant by objective evidence.

23 MS. BERNABEI: Hard data.

24 JUDGE SMITH: Now you want to change it to hard
25 data.

Sim 11-10,

MS. BERNABEI: I will change it to hard data.

JUDGE SMITH: Is there anything in your judgment, in your opinion, which was hard data to indicate that there was an effort to draw a bubble following about 2 p.m. and before 3:08?

Is that the question?

MS. BERNABEI: That is correct.

JUDGE SMITH: And it is up to him to decide what is hard data, right?

MS. BERNABEI: Right.

JUDGE SMITH: Okay. And that is as he sits there now?

MS. BERNABEI: Right.

JUDGE SMITH: So really the question is does this page 2 present to him hard data in answer to your question?

MS. BERNABEI: I think his testimony is that there is no information available to draw that inference.

JUDGE SMITH: And now what you have done is you have pointed this out to him and after having pointed it out to him, the question is put back to him?

MS. BERNABEI: That is right.

BY MS. BERNABEI:

Q Isn't there information that in fact there were steps, specifically turning on the heaters, to draw a

Sim 11-11

1 bubble in the pressurizer prior to closing the block valve
2 at 3:08 p.m.?

3 A I have trouble with hard data when it is labeled
4 as about 3 o'clock. I have trouble because you seem to be
5 wanting to draw a sharp distinction between about 3 o'clock
6 and 3:08. I personally ---

7 JUDGE SMITH: What that your intention?

8 MS. BERNABEI: No.

9 THE WITNESS: I personally do not base any con-
10 clusion of mine on whether somebody was or was not trying
11 to draw a bubble at about 3 p.m.

12 JUDGE SMITH: Excuse me. Let's see if we can
13 clarify it.

14 Assuming that about 1500 in here is accurate,
15 and I guess the direction of the question is does the data
16 attached to that notation constitute, in your view, hard
17 data indicating an effort to draw a bubble?

18 MS. BERNABEI: Or evidence that in fact there
19 was an attempt to draw a bubble prior to 3:08 p.m.

20 THE WITNESS: I guess I will have to answer
21 no, because if the block valve us still open, I don't think
22 that is a meaningful effort to draw a bubble until the block
23 closed.

24 BY MS. BERNABEI:

25 Q It is fair to say that apparently the heaters,

Sim 11-12

1 according to Mr. McGovern's chronology, the heaters were
2 turned on prior to closing the block valve; is that correct?

3 A That appears to be true.

4 JUDGE SMITH: Is there any other reason to turn
5 the heaters on, notwithstanding the position of the block
6 valve?

7 THE WITNESS: I think the logical reason for
8 the heaters is to try to establish a bubble. I think it is
9 also true that the operators try to do a lot of different
10 things without necessarily knowing exactly why they were
11 doing them. But, again, I have no -- myself, I don't reach
12 any conclusion and I don't have any argument about whether
13 or not in this time period people were or were not trying
14 to draw a bubble. I accept Chwastyk's comments about drawing
15 a bubble in that time period.

16 BY MS. BERNABEI:

17 Q And isn't Mr. Chwastyk's testimony further that
18 he attempted to draw a bubble and to close the block valve
19 in an effort to repressurize as a result of his understanding
20 of the pressure spike?

21 A I think the answer to that is no. In fact ---

22 Q It is not his testimony, Mr. Dieckamp?

23 A It is not as you stated it.

24 MR. BLAKE: Can we have a citation to the testi-
25 mony to which you refer, Ms. Bernabei?

Sim 11-13 1

MS. BERNABEI: It is almost all of his
testimony, but we will get back to Mr. Chwastyk ---

THE WITNESS: Well, may I explain why I believe
that, because later in the afternoon ---

JUDGE SMITH: I don't think you have to at this
point, Mr. Dieckamp. It is up to counsel to proceed.

THE WITNESS: All right.

MS. BERNABEI: I would to mark as TIMA Exhibit
13, Instructor Notes, Revision 0, which appear to be
training materials for TMI-2.

(The document referred to was
marked TMIA Exhibit 13 for
identification.)

MR. BLAKE: Ms. Bernabei, are we leaving this
one subject area of repressurization?

MS. BERNABEI: No.

MR. BLAKE: Thank you.

THE WITNESS: Is it an appropriate time then
to comment on why I answered the way I did?

MS. BERNABEI: I will return to it, Mr. Dieckamp.
You will have a full opportunity to say how you interpret
Mr. Chwastyk's interviews.

JUDGE SMITH: The way the record stands right
now, Mr. Dieckamp, the only thing we have on Chwastyk is
what you say, and it is up to her to proceed. Then when

Sim 11-14

1 that happens then you will have an opportunity to explain
2 why you interpret the testimony differently.

3 THE WITNESS: Judge Smith, she, Ms. Bernabei,
4 characterized Chwastyk's testimony in a way which I could
5 not agree with. That was the reason for my "No."

6 MS. BERNABEI: That is fine. I understand that.

7 JUDGE SMITH: If it is a mischaracterization,
8 we trust that the Board will find out about it and you will
9 have an opportunity to point it out to us.

10 BY MS. BERNABEI:

11 Q You have before you TMIA Exhibit 13; is that
12 correct, Mr. Dieckamp?

13 A I don't know whether it is exact. I have some-
14 thing which says Instructor Notes titled TMI-2 Accident,
15 Revision 0.

16 Q Okay. I would like to refer you now to page 4.
17 I can represent that these were produced by the company in
18 the course of discovery.

19 A You mean the fourth page?

20 Q The fourth page, that is correct.

21 JUDGE SMITH: Wait a minute.

22 (Pause.)

23 You may proceed.

24 BY MS. BERNABEI:

25 Q Mr. Dieckamp, to put a little context on this

Sim 11-15

1 question, this appears to be Instructors Notes for a lesson
2 plan on the TMI-2 accident; is that correct?

3 A I guess that is what it is.

4 Q Now there are two lesson objectives, are there
5 not, as stated on page 1 of TMIA Exhibit 13? First, to
6 review the TMI-2 accident with operations personnel to
7 ensure an understanding of the major factors which lead to
8 or aggravated the seriousness of the accident?

9 A Yes.

10 Q And the second one being to review with operations
11 personnel the thermal and hydraulic behavior of the primary
12 system and the secondary side during the accident?

13 A Yes.

14 Q Now there are certain references, are there not,
15 listed on page 1?

16 A Yes.

17 Q And those references are, first of all, the
18 NRC original investigation into the accident, the investi-
19 gative report, NUREG 0600?

20 A Yes.

21 Q Then the NSAC 1 report; is that correct?

22 A Yes.

23 Q And that is the to document to which we are
24 been referring just prior to this time; is that correct?

25 A Yes.

Sim 11-16

1 Q The third one is an LER 79-014. Are you familiar
2 with that?

3 A No, I am not. I don't recognize that number, let's
4 put it that way.

5 Q Okay. Can you tell us generally what an LER is?

6 A It is a licensee event report it is filing with
7 the Commission to describe the circumstances of some problem
8 or some event that I think goes outside the technical
9 specifications.

10 Q Okay. So you would assume, given this lesson
11 plan, it would be connected to the accident; is that correct?

12 A I guess that is a fair assumption, but I don't
13 happen to know that, and I don't know it to the opposite
14 either.

15 Q Now Item 4 is a preliminary annotated sequence
16 of events of March 28th, 1979; is that correct?

17 A Yes.

18 Q Now you were familiar at or near the time of the
19 issuance of all of these reports of these reports, were you
20 not? You were familiar with NUREG 0600 at the time it
21 was issued, or near the time it was issued?

22 A Yes, and it was issued towards the end of 1979.

23 Q Right. Now NSAC 1 I think you have testified
24 you were familiar with at or near the time it was issued?

25 A Yes.

Sim 11-17 1

Q And similarly, although not defined, you were familiar with the LERs issued or written with respect to the accident at or near the time they were written?

2

A Probably.

3

Q And you were familiar with the preliminary annotated sequence of events, were you not?

4

A I am not sure I know which one that is, but I probably was familiar with it.

5

Q Now referring you to page 4, it appears to be part of a sequence of events of occurrences and operator actions during the accident; is that correct? I am just talking about generally the set-up of these instructor notes.

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#12-1-SueT 1

2 Q Okay. 2:28 p.m., there is a notation that the
bubble was reformed in the pressurizer; is that correct?

3 A Yes.

4 Q It's also a notation that the OTSG pressure
5 begins to increase; is that correct? At that same time
6 period?

7 A Oh, yes. OTSG.

8 Q Assuming now these instructor notes are correct
9 about the sequence of events and the actions during the
10 accident, this would indicate that the bubble, or a bubble,
11 was reformed in the pressurizer at approximately 2:28 p.m.
12 on March 28th, is that correct?

13 MR. GOLDBERG: I would like to state a general
14 and continuing objection to Ms. Bernabei's line of question-
15 ing. The record is going to show that the bulk of the time
16 taken up by Ms. Bernabei's questioning is to get Mr. Dieckamp
17 to restate exactly what is stated in numerous documents.

18 The documents speak for themselves. I think if
19 she wishes to ask Mr. Dieckamp whether he agrees or disagrees
20 or what his understanding is or what something means, but
21 to have him item by item agree that that's what the document
22 states I think is objectionable, because the document speaks
23 for itself and it consumes an inordinate amount of hearing
24 time which is not necessary to ask Mr. Dieckamp the real
25 questions that she wants to get to to make her point.

#12-2-SueT1

MS. BERNABEI: Well, I've already asked him those questions and he said he had no information of this fact. And I'm attempting to point out to him information that we have within our possession -- the Company apparently has -- which would indicate that his conclusion was wrong.

And I think I'm entitled to do that on cross-examination.

JUDGE SMITH: This is a very important part of the issue. We will give considerable latitude to Intervenors in the cross-examination of Mr. Dieckamp.

Moreover, the documents do not necessarily speak for themselves. And Mr. Dieckamp's interpretation of them today might be important. Of course, his interpretation of them at the time would have been more important I think.

In any event, we are going to give the Intervenors a great deal of latitude on this.

WITNESS DIECKAMP: By the way, if I may, at the time this document is listed it looks like 1981.

JUDGE SMITH: That's correct.

MS. BERNABEI: I think that's right.

BY MS. BERNABEI: (Continuing)

Q This would indicate, would it not, Mr. Dieckamp, that a bubble was reformed in the pressurizer at 2:28 p.m., that it's prior to closing the block valve at 3:08 p.m.?

A Well, it says bubble reformed in the pressurizer.

#12-3-SueT

1 That's all it says. And --

2 Q Now, it's indicated that this sequence of events
3 in this notation as well is based on the references provided
4 in Item 3 on Page 1? It is NUREG 0600, NSAC, the LER in
5 the preliminary annotated sequence of events.

6 JUDGE SMITH: What's your question?

7 BY MS. BERNABEI: (Continuing)

8 Q Okay. Wouldn't it be indicated from this docu-
9 ment that that notation of bubble reformed in the pressurizer
10 would be based on the references listed on Page 1?

11 JUDGE SMITH: Is Mr. Goldberg correct, you are
12 just trying to get Mr. Dieckamp to agree with your evaluation
13 of this document?

14 MS. BERNABEI: Well, then I'm going to ask him
15 if it changes his opinion as to whether or not there is such
16 evidence.

17 JUDGE SMITH: Okay, Mr. Goldberg. Mr. Dieckamp
18 can --

19 WITNESS DIECKAMP: What is the question again?

20 BY MS. BERNABEI: (Continuing)

21 Q Doesn't it appear that the notation about the
22 bubble reformed in the pressurizer at 2:28 p.m. is founded
23 on the references listed on Page 1 of the exhibit?

24 A The format of this document would suggest that
25 that's the case.

#12-4-SueT 1 Q Given the fact that the NSAC report lists re-
2 pressurization of the system at -- beginning at 3:08 p.m.
3 with the closing of the block valve, one interpretation of
4 the McGovern interview would be that the heaters in the
5 pressurizer were turned on and the block valve closed sub-
6 sequently in the same time frame, and given the fact that
7 instructor notes for training on the accident indicate a
8 bubble was reformed in the pressurizer at 2:28 p.m., would
9 that change your interpretation or testimony today as to
10 whether or not the pressure spike caused the plant staff to
11 begin a repressurization strategy after the pressure spike?

12 A No, it does not.

13 Q So, your testimony is today that the pressure
14 spike did not influence a change in strategy which began a
15 short time after the pressure spike on March 28th?

16 A My testimony is that I do not see operator actions
17 that indicate to me that the operators recognized not only
18 what the cause of the pressure spike or the ramification of
19 the pressure spike in their subsequent actions. I don't
20 have any argument about whether they were or were not trying
21 to establish a bubble in the pressurizer.

22 Q Now, it is Mr. Chwastyk's testimony, is it not,
23 that he requested and obtained permission from Gary Miller
24 to establish, to draw a bubble in the pressurizer, in his
25 words, due to his understanding of the pressure spike?

#12-5-SueT 1

2 A I'm aware of that testimony. And I'm absolutely
3 amazed that he can feel that he got approval at about 2 p.m.
4 and then leave the block valve open for another hour. I'm
5 absolutely amazed at that.

6 Q Isn't it also fair to say that Mr. Chwastyk
7 testified that he sought and gained permission from Gary
8 Miller to draw a bubble in the pressurizer in order to re-
9 pressurize?

10 That is, to cease depressurization and go into
11 a repressurization mode?

12 A It's not my reading of this testimony that he
13 speaks in terms of repressurizing. In fact, later in the
14 afternoon when he is directed to turn the pump on to re-
15 pressurize he takes exception to that direction and attempts
16 to have it changed. He argues against it.

17 Q Let me just make sure I understand. It's your
18 testimony that he does not see drawing the bubble as an
19 attempt to begin repressurization; is that correct?

20 A My real testimony --

21 Q No, no. I'm asking you a very direct question,
22 Mr. Dieckamp.

23 Is it your understanding of Mr. Chwastyk's testi-
24 mony that he did not testify that he wished to draw the
25 bubble in order to begin repressurization?

A I take his testimony to draw the bubble at face

#12-6-SueT 1

value for just that.

2 Q And you do not take it --

3 A I do not see --

4 Q -- as it's one step in a repressurization strategy?

5 A I do not see him identifying it that way. In
6 fact, I see him arguing against repressurization as a
7 general idea.8 Q Are you familiar with Mr. Chwastyk's interview or
9 deposition in the course of the discovery in this proceeding?10 A Yes, I'm familiar with all of his testimony,
11 starting in May of 1979.12 Q Is it fair to say, in any case, you do not argue
13 with the finding of the NSAC report that repressurization
14 began at 3:08 with the closing of the block valve?15 A I have never said that I agree with that. I
16 said that NSAC --

17 Q What basis --

18 A -- can --

19 JUDGE SMITH: Wait a minute; let him finish.

20 MR. BERNABEI: I'm asking if he agrees or dis-
21 agrees, first of all.

22 BY MS. BERNABEI: (Continuing)

23 Q Do you agree or disagree with that conclusion?

24 A What was the conclusion again?

25 Q That repressurization began at 3:08 p.m. with

#12-7-SueT

1 the closing of the block valve?

2 A I agree that NSAC identifies that as a time
3 period including repressurization.

4 Q Do you agree --

5 A As a matter of fact, when you go to read what
6 they say on the pages that we were looking at earlier,
7 they identify repressurization with the start of the makeup
8 pump later in the afternoon.

9 Q I think that they say that that is a portion of
10 repressurization. Do they not say that it begins with
11 closing of the block valve at 3:08 p.m.?

12 A I agree that they choose that as the start of
13 the time period. They --

14 Q Do you agree or disagree with that?

15 A -- choose that as a start of the time period.
16 They then --

17 Q Do you agree --

18 JUDGE SMITH: Let him finish.

19 MS. BERNABEI: I'm --

20 JUDGE SMITH: Just let him finish. You are asking
21 him to agree or disagree with a very complex conclusion. Let
22 him explain his answer. You asked the question. Let him
23 explain.

24 MS. BERNABEI: I'm asking if he believes re-
25 pressurization started with the closing of the block valve.

#12-8-SueT

1 I think it only requires a yes or no answer.

2 JUDGE SMITH: Can you answer it yes or no?

3 WITNESS DIECKAMP: I don't think I can properly
4 answer yes or no. The phase that NSAC identifies, Phase 6,
5 starts at 3:08. They label that phase repressurization.

6 In my mind, and I think NSAC would probably not
7 disagree, the real repressurization occurs later on around
8 5:45 when the makeup pump is left on for an extended period
9 of time. And Phase 6 of the NSAC analysis encompasses all
10 of that time period out through about 8 o'clock at night.

11 BY MS. BERNABEI: (Continuing)

12 Q Is there any phrase in the NSAC report about real
13 pressurization starting at 5:20 p.m. with increase in HPI?

14 A That's my phrase.

15 Q Okay. There is no such phrase in NSAC; is that
16 fair to say?

17 A I don't think. Well, I don't see it.

18 MR. GOLDBERG: I would like to point out that to
19 the extent there is a dispute about the meaning of the NSAC
20 report and when they believe that the real pressurization
21 began, I think it was for this very purpose that Mr. Blake
22 emphasized that Dr. Zebroski was a witness in this proceed-
23 ing who could be asked these types of questions, since he
24 has firsthand knowledge of these matters, and that TMIA
25 having passed that opportunity now I think is hard put to

#12-9-SueT 1

argue their interpretation of the NSAC report being the correct one.

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MS. BERNABEI: It's not our interpretation. It's the report on its face. We did not question Dr. Zebroski because we think the report is clear on its face. It says 3:08 is the beginning of the phase.

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I have a right to question Mr. Dieckamp, because he apparently disagrees with the plain meaning of the document.

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JUDGE SMITH: Well, whether it's a plain meaning or not is one thing. But you are being allowed to examine Mr. Dieckamp.

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I do wish, however, that there would be careful distinction, if there is any, between a depressurization strategy and depressurization as a plant condition.

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MS. BERNABEI: The NSAC report, in my preliminary questions to Mr. Dieckamp, I believe I included that the NSAC report describes mode and strategy as the same.

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JUDGE SMITH: Well, I'm waiting to see if that distinction shines through here. I don't know, but I think that that distinction might be important.

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MS. BERNABEI: I think both words in the early introductory part to which I referred Mr. Dieckamp, Appendix TH, uses those interchangeably, or somewhat interchangeably.

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BY MS. BERNABEI: (Continuing)

#12-10-SueT 1

2 Q Is that fair to say, Mr. Dieckamp? Do you see
3 any difference in the modes or phases which are listed in
4 the NSAC report and a strategy?

5 A Well, what I see is that NSAC made judgments
6 about how to split up the sequence of events into a number
7 of time periods. I don't think they in turn then say that
8 repressurization started exactly at 3:08.

9 And when I look at the data then that occurs in
10 that time period, I draw my own conclusion about when re-
11 pressurization actually occurred and in response to what
12 actions it actually occurred.

13 And I don't think that argues with NSAC. I
14 think they simply identify a time period.

15 Q Can you answer my question, Mr. Dieckamp? It
16 was, do you see a difference -- this is in response to
17 Judge Smith's question -- between a strategy or a mode or
18 phase as listed in NSAC?

19 A (Pause.)

20 Q Can you answer yes or no?

21 A I'm not sure I know what the words mean.

22 Q Okay. Let me try once again. NSAC lists
23 certain modes or phases; is that correct?

24 A NSAC, in my mind, lists certain phases.

25 Q Okay. And those phases are described as modes
of operation in the reactor, are they not?

#12-11-Sue

2 A I don't know. If they do, fine. But I just
don't happen to know that.

3 Q Did you understand them that way, the phases I
4 mean?

5 A I understand the phases. I don't know whether
6 I know what the word "modes" mean.

7 Q Do you also understand the word "phase" to
8 indicate the strategy then being used or employed to bring
9 the reactor to a cold shutdown?

10 A In that general time period.

11 Q Okay. Another way to phrase it would be a
12 phase as an operating mode of the reactor; is that fair to
13 say?

14 A I don't know what you mean by that.

15 Q Okay. Let me refer you now to Page 2 of
16 Appendix TH, the third sentence in that first paragraph
17 states, does it not: The intent is to divide the accident
18 time into intervals representing various operating modes
19 that occurred during the accident?

20 Is that your understanding, Mr. Dieckamp?

21 A My understanding is that the NSAC report says
22 what it says.

23 JUDGE SMITH: I think we have questioned Mr.
24 Dieckamp enough on --

25 MS. BERNABEI: That's fine.

#12-12-SueTl

2 JUDGE SMITH: -- what they say, but I still have
3 not heard anything from anybody which equates a type of
4 strategy with phase. I think you are asking us to infer
5 that each phase listed in the NSAC report, in the Appendix,
6 is the same as a strategy.

7 MS. BERNABEI: I think Mr. Dieckamp testified
8 that was his understanding.

9 JUDGE SMITH: Well, did you? I mean, certainly --

10 MS. BERNABEI: I asked him a question, and I
11 think he stated that.

12 WITNESS DIECKAMP: The semantic tussle between
13 myself and Ms. Bernabei is over whether repressurization
14 begins at 3:08 or some time later. I think it begins at
15 about 5:45 when the makeup pump is turned on and left on
16 until the plant achieves something over 2,000 psi.

17 I think that NSAC identified a time period that
18 they called repressurization as starting at 3:08 when the
19 block valve was closed because it could not possibly have
20 started any earlier than that.

21 Now, the issue between us is, did the re-
22 pressurization start immediately at 3:08 or did it start
23 some time later when the plant was given instructions to
24 turn on the makeup pump and leave it on.

25 JUDGE SMITH: Yes. And I --

WITNESS DIECKAMP: That's the issue here.

#12-13-SueT 1

JUDGE SMITH: I understood that being the issue between you and Ms. Bernabei. What I have not understood is whether each of you in discussing it have equated the beginning of repressurization as intentional repressurization or functional repressurization.

WITNESS DIECKAMP: I interpret NSAC's phases as being nothing more than an arbitrary allocation of the time period of the accident. Just a convenient way to break it up into several time zones and characterize it, not necessarily in terms of what happened immediately, but what happens at some time during that phase.

JUDGE LINENBERGER: So, in other words, Mr. Dieckamp, you are saying that you look at the NSAC breakdowns as somewhat -- into phases -- arbitrary labels of activities but not necessarily corresponding in real clock time to the actual accomplishment of the things talked about in those labels?

Is that --

WITNESS DIECKAMP: Yes, I think that's fair.

JUDGE LINENBERGER: There is still another possibility that I have not heard mentioned, although maybe it's implicit in something that is going on here.

It is, to me, possible -- and I'm a newcomer to this proceeding -- that NSAC thought they saw something happening about -- what time are we talking about here --

#12-14-SueT 1 1500 on this Page 2, that they thought was going to lead
2 to pressurization, that they interpreted it as operator
3 intent, but indeed actual pressurization did not occur until
4 some time later because the wrong combinations of things
5 were done or not done.

6 It seems to me that is a third alternative that
7 exists in the gulf between you and Ms. Bernabei.

8 WITNESS DIECKAMP: I think when you look at the
9 words -- and I don't have a copy in front of me, could some-
10 body give me a copy?

11 (Ms. Bernabei furnishes the witness with a
12 document.)

13 On Page 3 of whatever it is, Appendix TH, where
14 it defines Phase 6, it says: This phase covers the period
15 from the beginning of gradual repressurization to the
16 continuous operation of reactor coolant pump 1-A, establish-
17 ing a stable long term cooling mode, be it a loop-A steam
18 generator. The operation of high pressure injection pumps
19 during the middle of this period combined with a venting
20 of hydrogen during Phase 5, the prior phase, resulted in
21 conditions which set the stage for recovery of the system.

22 And so I'm just saying that out of this conve-
23 niently identified time period, to me the significant re-
24 pressurization occurs when the plant parameters indeed show
25 repressurization.

#12-15-SueT

1 MR. BLAKE: Judge Linenberger, I have tried to
2 sit on my hands here today, knowing that Mr. Dieckamp is
3 an important if not the most important person here, and I've
4 not tried to interject. But I make two observations at
5 this juncture.

6 One is that Dr. Zebroski, who we know to be
7 expert in and knowledgeable about, and an author of this
8 NSAC report, was here to interpret all of these things. And
9 it is a remarkable expenditure of time now that we try to
10 draw out of Mr. Dieckamp what in the world these things
11 mean.

12 Dr. Zebroski did indeed talk about, from his
13 understanding of the accident and the objective evidence,
14 what he thought or didn't see in terms of any strategy
15 or operator actions which resulted from the pressure spike.
16 He specifically addressed that.

17 Finally, I would observe that this is a big
18 report. And there are lots of statements in it. One of
19 them, to which we have not specifically referred although
20 we read the sentence after it, says: The phases are indeed
21 arbitrary. It's the next sentence which refers to operating
22 modes which was read.

23 But there are other sentences in this report
24 like: "When the primary system was later repressurized,
25 beginning at 1323, which is 5:23 in the afternoon, with the

#12-16-SueT 1

start of makeup pump, MUP1C, remaining hydrogen was compressed..." et cetera. I mean, there is a lot of information in here.

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Mr. Dieckamp --

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MS. BERNABEI: Are we --

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MR. BLAKE: -- is not the person to try now to interpret NSAC.

8

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MS. BERNABEI: Are we going to have Mr. Blake testify, because if he is going to testify I --

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MR. BLAKE: No, but I don't want the Board misled.

12

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MS. BERNABEI: First of all, we did not ask Dr. Zebroski. We think the report is clear on its face.

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We are questioning Mr. Dieckamp because we think it discredits the basis for his testimony; that is, that repressurization -- that there was not repressurization in response to the pressure spike. We have no obligation to put on and ask questions of the witnesses Mr. Blake wants us --

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JUDGE SMITH: It depends upon what your objectives are. If your objectives are to test Mr. Dieckamp's knowledge and his knowledge of the events at the time during the relevant periods, that's one thing.

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But if your objectives are to establish what the actual plant modes were at the time, directly as evidence

#12-17-SueT 1

2 for us to look at, then as we did talk about when Dr.
3 Zebroski was here, that may have been the better witness.
4 Now we have been allowing you to go about any place you
5 want to in the examination of Mr. Dieckamp because I infer
6 what you are trying to do is to test his knowledge and
7 probably what you are trying to do is make him concede as
8 he sits there on the witness stand that something happened.

9 MS. BERNABEI: No. It's not what -- let me
10 state what we are trying to do.

11 Mr. Dieckamp states in the paragraph to which
12 I referred him, at Page 12, that not only on May 9th,
13 1979 did he believe that there was not a change in strategy
14 in response to the pressure spike but he believes that
15 today. And he knows of no objective evidence -- I believe
16 that was his answer, no objective evidence that would
17 indicate such a strategy began after the pressure spike.

18 JUDGE SMITH: Now, I understand that.

19 MS. BERNABEI: So, what I was pointing out to
20 him is what I consider objective evidence. I think --

21 JUDGE SMITH: Of the strategy?

22 MS. BERNABEI: Of the change in strategy a
23 short time after the pressure spike.

24 JUDGE SMITH: And saying now, look at this
25 objective evidence, Mr. Dieckamp, what say you about this
objective evidence?

#12-18-SueT 1

MS. BERNABEI: That's right.

2

JUDGE SMITH: And where the dispute, looking back, began. I see -- I have seen no difficulty in the communication between you and Mr. Dieckamp. I see a difficulty in your inserting in your arguments, your discussion, the word "strategy" but the word never appears between you and Mr. Dieckamp.

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MS. BERNABEI: No. I did ask a specific question --

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JUDGE SMITH: About mode, operating mode.

10

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MS. BERNABEI: No, no. I asked a specific question in response to your concern. And I think Mr. -- we can read the record back, but I'm almost certain that Mr. Dieckamp agreed with me, yes, I thought of strategy in the same way as the phases are used in this report.

12

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JUDGE SMITH: Well, except that he says that somewhere within the broad boundaries of a particular phase there must be some type of strategy.

16

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But so far, the exchange between you and Mr. Dieckamp has produced nothing as far as I can see.

19

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MS. BERNABEI: That is not true, Judge Smith. I think you didn't listen to the answer to the question.

22

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JUDGE SMITH: That's possible. I may not have heard it completely. But I think it's important that we understand it.

25

MS. BERNABEI: Yes. Let me ask him the question

#12-19-SueT 1

once again directly.

2

BY MS. BERNABEI: (Continuing)

3

Q Do you interpret the phase as divided in the
4 NSAC report as strategy?

5

Can you answer the question yes or no?

6

A No, I do not.

7

Q Do you interpret strategy in the same sense as
8 operating mode, as that term is used in the NSAC report?

9

A I'm not familiar enough to know exactly what
10 they mean by operating mode.

11

JUDGE SMITH: Let me --

12

MS. BERNABEI: I'm trying to answer your
13 objection, Judge Smith.

14

JUDGE SMITH: Right. But let's take your
15 first question. And maybe if I point out some of my
16 problems maybe you can focus a little bit better upon my
17 concern about the lack of communication.

18

Now, let's take Phase 1, okay. Forced circula-
19 tion of primary coolant was maintained in all loops during
20 this phase with continuous loss of primary system coolant.

21

Now, I know from what I know about this accident
22 there is no strategy to have a continuous loss of primary
23 system coolant. I know that. See, and so when you say you
24 equate a phase with a strategy it just is not. It cannot
25 be it. It is not grasping upon what you are inferring from.

1 JUDGE SMITH: The primary system coolant continued
2 to degrade. I know that was not a strategy.

3 We are approaching the conditions which resulted
4 in major damage to the core. That was not a strategy.
5 This is the point that I think that both you and Mr.
6 Dieckamp can recognize our concerns and work it out. Now,
7 work it out.

8 BY MS. BERNABEI: (Continuing)

9 Q Do you know of any way that the reactor could
10 repressurize without intentional operator action, in the
11 conditions that existed on March 28th.

12 That is, do you know any way repressurization
13 could occur from a depressurization mode without intentional
14 operator actions to repressurize?

15 A I think it did take intentional action to close
16 the block valve, and to leave the pumps running long enough
17 to inject enough water to repressurize the system.

18 Q So, it is fair to say that whatever repressuri-
19 zation occurred as described in the NSAC Report on March 28th
20 was the result of intentional operator action, despite our
21 dispute as to when that may have begun?

22 A As a result of intentional action which operators
23 took, most of which was directed by their supervision.

24 JUDGE SMITH: Let's go back to the question, Mr.
25 Dieckamp, and I think it is important that the record be

1 precise here.

2 She asked the question in exactly the way you
3 answered it, and then I frowned at her, and then -- I
4 don't know if you caught it, but then she added to the
5 question, the sine quo non of the question, and that is,
6 intentional operator action, the intention being to
7 repressurize, not to manipulate a valve which is
8 intentional, but the intention being to repressurize,
9 and this is where I would like to be assured that you --
10 her question is directed and your answer is directed.

11 That is the area that I think that the exchange
12 between you still remains in doubt.

13 WITNESS: I tried to indicate that the intentional-
14 ness occurred around 5:30 when the plant supervision
15 directed the operators to take actions which would, indeed,
16 repressurize.

17 That was the intentional repressurization, from
18 my understanding.

19 JUDGE SMITH: However, during this afternoon, I
20 believe that Ms. Bernabei has been questioning you under
21 the assumption that the intentional operator actions, the
22 block valve closure and the like, has been a deliberate
23 intent to repressurize by design, a strategy, and this
24 is -- I just wish however it turns out, tha the question
25 be understood and the answer be understood.

BY MS. BERNABEI: (Continuing)

1 Q It is fair to say that regardless of if you are
2 right or I am right, Mr. Dieckamp, what ever intent there
3 was to repressurize, whatever action is taken to repressurize
4 or intentional action, is that fair to say -- intentional
5 operators action -- directed by management?

6 JUDGE SMITH: There again, I hope the question
7 is carefully parsed.

8 WITNESS: What was the question again, please?

9 BY MS. BERNABEI: (Continuing)

10 Q Regardless if you are right or I am right, as
11 to when repressurization began, whatever actions were taken
12 to close the block valve or to increase or start the
13 makeup pump were intentional operator actions. Is that
14 fair to say?

15 A I think that is fair to say. I don't think there
16 were actions which somehow, somebody didn't think was the
17 right thing to do.

18 Q And is it fair to say that you could not
19 repressurize in the conditions existing at TMI-2 on the
20 day of the accident without operators taking intentional
21 steps to do so, that is, the reactor wouldn't fall in, or
22 begin to repressurize on its own?

23 A I think that is correct.

24 Q And those actions taken would indicate an
25 intent on the part of the operators to repressurize?

1 That specific intent?

2 A Well, there were actions taken for the specific
3 purpose of repressurizing the system, yes.

4 Q And whatever action those are represented to
5 be were intentional actions to repressurize?

6 A There were specific actions which fit that
7 description. Not whatever, but there are specific ones
8 that do fit that.

9 Q And those specific actions were done with the
10 intent to repressurize, is that correct?

11 A Yes.

12 JUDGE SMITH: Aren't you having too vague a
13 question, or did I miss something?

14 MR. BLAKE: I don't think we missed anything.
15 I think we have made these ships passing in the night
16 here with that last question and answer.

17 MS. BERNABEI: I think the NSAC report is
18 going to be a big enough ship to catch whatever we met.

19 BY MS. BERNABEI: (Continuing)

20 Q When did you become aware of the first NRC
21 interview of Joe Chwastyk?

22 JUDGE SMITH: Are you done with this point,
23 then? You are satisfied with the record on it.

24 MS. BARNEBEI: Yes.

25 JUDGE SMITH: Okay. Before we go away from

1 it, though, to me it has been very confusing. I would
2 like to consult with the other Board members to see if
3 there are left open items here.

4 BOARD EXAMINATION

5 BY JUDGE SMITH:

6 Q Let me ask just one or two more questions to
7 make sure there is not a void in this aspect of it.
8 Now, Mr. Dieckamp, as I understand, the most recent
9 exchange that you recognize that according to the Report
10 certain actions were taken which in your view were done
11 for the purpose of intentionally repressurizing the
12 system.

13 A That is correct.

14 Q But you had earlier testified at the very
15 beginning of this exchange, that some actions were taken
16 without really any strategy in mind.

17 A Well, I think, again, my reason for my view
18 on that is Mr. Chwastyk's testimony on this area that
19 was to re-establish a bubble. My impression is that he
20 desired to do that, or his testimony indicated he desired
21 to do that, if for no other reason than to get the plant
22 into what he considered more nearly a familiar configuration,
23 and I have no quarrel with that.

24 Q Okay. But the Point I am trying to get is that
25 we have a set of actions, some of which would lead to

XXXX

1 repressurization.

2 Of that set of actions, a sub-set of actions
3 are designed to lead to repressurization. Is there a
4 sub-set of actions which would lead to repressurization
5 which in your view are not necessarily designed to lead
6 to repressurization?

7 For example, the one that you just alluded to?

8 A I don't think there was anything wrong with the
9 effort to draw the bubble. I think the distinction, as
10 I derive it from the principal testifier on this subject,
11 Chwastyk, is that he felt that drawing the bubble itself
12 was sufficient, as indicated by his repeated testimony that
13 when directed to pressurize, namely to leave the makeup
14 pump on, he took exception to that.

15 He tried to argue against it.

16 Q But I am trying to make sure that we understand
17 the very end of your most recent -- your latest exchange
18 with Ms. Bernabei, and that is, as I recall, the earliest
19 that you were able to identify an action that you felt
20 comfortable, was the beginning of a deliberate strategy
21 to repressurize was five something in the afternoon, when
22 makeup pumps were actuated.

23 A To me, that is the most meaningful action that
24 results in repressurization.

25 Q And that is one, as I understand the sense of

1 your testimony, is one that at least you can infer at
2 that point that that is what they had in mind. That is
3 what they were doing.

4 A They had in mind repressurization of the system
5 so that they could operate a primary coolant pump.

6 Q That is exactly why they did it.

7 A That is right.

8 Q They turned on that pump at five something in
9 the afternoon, with the deliberate idea that they were
10 going to repressurize the system.

11 A Yes.

12 Q Now, are there any actions taken prior to that
13 time in the afternoon which objectively, looking at it
14 from today's point of view, might have been actions leading
15 to repressurization but from which you cannot infer that
16 was the operator's intent.

17 That is the void that we are trying to plug up
18 in the record, if there is such a void.

19 A Clearly, closing the block valve would fall in
20 that category. However --

21 Q They would close the block valve without even
22 thinking of repressurization, because it shouldn't be
23 open?

24 A Simply that they wanted to draw the bubble, and
25 I think that required closing the block valve. The same

1 action would have been consistent with a more definitive
2 effort to repressurize.

3 So, there is some overlapping interpretations
4 of some of those actions, and again, the only reason that
5 I focus on this area is to look to see, is there an action
6 there that somebody took or says he took because he under-
7 stood the hydrogen, and therefore, this was the right thing
8 to do.

9 That is the part that I have not been able to
10 find.

11 Q But Ms. Bernabei is entitled to make a case
12 as she spent much of this afternoon to do, and argue it,
13 that the beginning of an intentional repressurization
14 strategy is an indication that the condition of the
15 plant was recognized at the time it began.

16 And much of the afternoon is spent, as Mr. Blake
17 stated, ships passing in the night. And I think that --
18 I can't think of anything else we can ask you on it.

19 I think you have indicated the actions that
20 took place before the makeup pump actuation at five
21 something, which if it were equivocal on your viewpoint, or
22 did not necessarily indicate an affirmative repressurization
23 strategy. Would that be a fair summary of your testimony?

24 A I think that is right. I would not describe
25 them as repressurization, but more importantly to me, I

1 don't see them as having been in direct response to
2 understanding of the hydrogen or the zirconium water
3 reaction. That is the part that I do not see.

4 Whether or not they were trying to draw a bubble
5 to me is incidental until they say why they were trying
6 to do that.

7 JUDGE SMITH: Now you inquire now, yes, if
8 you wish.

9 BY MS. BERNABEI: (Continuing)

10 Q Is there any way to continue depressurization
11 once you have closed the block valve?

12 A Yes. You can continue to lose water through
13 the let down system.

14 Q Was that occurring at TMI-2 at the time, at
15 3:08 p.m., when they closed the block valve?

16 A I think it was. There was no action taken
17 concurrently to cease water removal through the let down
18 system.

19 Q Now, it is true is it not, that HPI was on,
20 and continued to be on, although increased at 5:20 p.m.,
21 at the time the block valve was closed?

22 A I am not the world's expert on this, but my
23 understanding of makeup pump 1-B was for the purpose of
24 supplying pump bearing and coolant flow, and not running
25 at a level sufficient to result in any significant water

1 additions.

2 Q Let me ask the question again. There was HPI
3 flow that was maintained from the morning period through
4 the time the block valve was closed at 3:08 p.m., is that
5 correct?

6 A Makeup pump 1-B ran rather continuously during
7 most of this time period.

8 Q They were taking their order from Gary Miller,
9 is that correct, Mr. Dieckamp?

10 A Gosh, I don't know that, but it was significantly
11 throddled, and really during, I understand, during little
12 more than supplying bearing lubricant and coolant.

13 Q So your testimony is that the system continued
14 to depressurize after closing of the block valve at 3:08
15 p.m., is that your testimony?

16 A No, it is not my --

17 Q Is it fair to say that depressurization ceased
18 at the time the block valve was closed at 3:08 p.m.

19 A As I look at the diagram in front of me, on
20 coolant system pressure, it begins to ease upward from
21 the time that the block valve is closed at 3:08.

22 The makeup pump is operated only intermittently.
23 The only time the pressure really begins to move towards
24 repressurization is when makeup pump 1-C is turned on at
25 about 5:30, roughly, then left on.

1 Q So, it is fair to say that at 3:08 p.m.,
2 depressurization ceases and the pressure begins to rise?
3 However slowly, the pressure begins to rise?

4 A Sure, I will buy that.

5 Q And isn't it true that there is no way to re-
6 pressurize the system without closing the block valve. That
7 is a necessary component to repressurization?

8 A I think that is right.

9 Q Despite that fact -- let me ask you this. Do
10 you believe closing the block valves was a part of a
11 deliberate repressurization strategy on March 28th?

12 A That I don't know.

13 Q You don't know.

14 A I don't know why it was closed. I think it was
15 the right thing to do. As I said I am surprised that it
16 remained open for an hour after the hydrogen --

17 Court Reporter: Excuse me, I can't take both
18 of you at the same time.

19 MR. DIECKAMP: Sorry.

20 BY MS. BERNABEI: (Continuing)

21 Q But you don't know today whether or not it was
22 part of the deliberate strategy to repressurize, is that
23 correct?

24 A I guess I can't say to you that I know every
25 last piece of testimony that exists on this case. But for

1 the man who testifies most extensively about this period
2 of time, Mr. Chwastyk, I don't think I read him to say
3 that we closed the block valve in order to repressurize.
4 I read him to say we closed the block valve in order to
5 draw a bubble, and I take no exception to his view there.

6 Q What you are saying is you do not argue -- well,
7 let me ask you the question again. You do not know whether
8 or not the block valve was closed at 3:08 p.m., in order
9 to repressurize the system? Is that your testimony?

10 A I cannot sit here and tell you exactly what
11 the operators had in their mind when they closed the block
12 valve.

13 I notice, by the way, that they reopened it
14 again later at about five p.m., twice for some reason.
15 I don't know what that was.

16 MS. BERNABEI: I am going to move to strike
17 the last portion as nonresponsive to the question.

18 JUDGE SMITH: Overruled.

19 BY MS. BERNABEI: (Continuing)

20 Q You are familiar with the Chwastyk NRC interview
21 that took place on May 21st, 1979?

22 A Yes, I am.

23 Q When did you first become aware of that
24 interview?

25 A I do not know exactly when I first saw it. The

1 copy that I have available to me says it was typed, I think,
2 in July of '79, but I don't know when I first saw it.

3 Q Did you become aware of the statements Mr.
4 Chwastyk made in that interview any time prior to receiving
5 a transcribed copy of the interview?

6 A I don't think so. I don't know.

7 JUDGE SMITH: It seems to me you are going into
8 a new subject matter. I think we should have taken a
9 break at that time. Let's take a break. Ten minute
10 break.

11 (Short recess taken at 3:50 p.m.)

12 End 13.
13 MS fols.

Sim 14-1

1 JUDGE SMITH: Back on the record.

2 BY MS. BERNABEI:

3 Q Mr. Dieckamp, my question to you is if you knew
4 when the company received either a tape or a transcript --
5 first received a tape or a transcript of the Chwastyk
6 interview of May 21st, 1979?

7 A Do I know now or did I knew when?

8 Q Do you know now?

9 A I think I have recently become aware that we
10 received a tape on the day of the interview, but that is a
11 brand new piece of information to me.

12 Q Now did you take an efforts to avail yourself
13 of the NRC interviews being conducted in the course of the
14 original NRC investigation into the accident?

15 A I personally made no effort to follow all those
16 interviews.

17 Q Did you make any effort to follow the particular
18 interview of Mr. Chwastyk, that is the one on May 21st, 1979?

19 JUDGE SMITH: Is everyone clear about the time
20 frame? As of till now are you talking about?

21 MS. BERNABEI: Well, he obviously knows about
22 it now. I am asking him in the time frame that the
23 investigation was going on I should clarify.

24 BY MS. BERNABEI:

25 Q The time frame of the original NRC investigation

Sim 14-2

1 into the accident, did you avail yourself of Mr. Chwastyk's
2 interview or any of the interviews?

3 A I just do not have a recollection of which items
4 came to my attention or on what time scales, and if I put
5 myself back into that time period, I can't think of any
6 reason why I would have singled out Joe Chwastyk as somebody
7 to pay particular attention to.

8 Q Well, isn't it fair to say that some have
9 interpreted his interview as indicating that statements
10 in your mailgram are false?

11 MR. BLAKE: His interview of May 21st, 1979?

12 MS. BERNABEI: That is correct.

13 THE WITNESS: I guess some do, but I find that
14 incredible when that interview doesn't even include the
15 word hydrogen.

16 MS. BERNABEI: We are going to get to the inter-
17 view in a second.

18 BY MS. BERNABEI:

19 Q But your statement is you made no special efforts
20 to obtain this interview; is that correct?

21 A I don't think of any. I don't think so.

22 Q And today you don't know when you first became
23 aware of it?

24 A No, I do not.

25 Q You were present on May 7th for a Congressional

Sim 14-3

1 site tour that was taken of TMI on that date; is that
2 correct?

3 A Yes, I was.

4 Q Now what did you understand the purpose of that
5 site tour was?

6 A I don't know that my understanding went any
7 deeper than simply one of enabling a tour that the Udall
8 committee had requested. I don't relate to any deeper
9 understanding in their purpose for being there.

10 Q Now the Udall committee is an oversight committee
11 of the Nuclear Regulatory Commission; is that correct? Just
12 to put the tour in context; is that correct?

13 A I guess that is right. I guess I don't know
14 enough to be able to say exactly which committees of Congress
15 have what oversight over what, but I also don't have a
16 reason to argue with that.

17 Q Okay. There were Members of Congress as well
18 as Congressional staff on this tour on May 7th; is that
19 correct?

20 A Yes, that is right.

21 Q Now Commissioner Gilinsky was also on that
22 tour; is that correct? Then Commissioner Gilinsky.

23 A I think that is right.

24 Q And do you remember any conversations with
25 then Commissioner Gilinsky regarding GPU's management

Sim 14-4

1 reporting of the pressure spike to the NRC?

2 A I have no present recollection of that conversation
3 or that indicated conversation.

4 Q On that date or on any subsequent date did you
5 indicate to Commissioner Gilinsky that your management
6 learned of the pressure spike on Thursday instead of Friday
7 morning?

8 A Well, wait a minute. My knowledge of the learning
9 of the pressure spike occurred late in the night of March
10 the 29th.

11 Q I am talking about GPU management now.

12 A Well, now we have to define who are GPU management.

13 Q Okay. Yourself, Mr. Arnold and Mr. Wilson.

14 A I learned about it sometime on Friday. I don't
15 know when Bob Arnold learned about it or Mr. Wilson.

16 Q Did you tell Dr. Gilinsky at that site tour or
17 at any subsequent time that GPU management, including yourself,
18 learned of the pressure spike on Thursday and not on Friday?

19 A I did not learn about it on Thursday. That much
20 I can ---

21 Q So it is fair to say that you have never told
22 Dr. Gilinsky that you or GPU management learned of the
23 pressure spike on Thursday?

24 A It is conceivable that I said we the company
25 learned about it on Thursday night. I as an individual did

Sim 14-5

1 not learn about it. I do not know which individuals in the
2 company learned about it contemporaneously with its discovery
3 by Bill Lowe.

4 Q Do you remember any discussion with Commissioner
5 Gilinsky on that date about GPU or the licensee's failure
6 to report the information promptly to the NRC?

7 A I don't recall any discussion of that sort. It
8 may have occurred, but I just have no recollection of it.

9 Q Did you do any drafts of the mailgram, that is
10 prior to sending the final copy which you sent on May 9th?

11 A I probably did. I think it is sort of incredible
12 that I ever write anything once and once only.

13 Q Okay. And when did you compose the mailgram
14 or any drafts of that mailgram?

15 A I think I started composing it sometime in the
16 morning of May the 8th, 1979, sometime after becoming
17 aware of the newspaper article, but even then I am kind
18 of guessing at that. I don't have a clear memory as
19 to when I sat down to write it.

20 Q And what was the purpose of your mailgram?

21 A To inform Congressman Udall and others that
22 I took exception to the implications of the New York Times
23 article.

24 Q Who specifically, other than Congressman Udall,
25 did you wish to inform that you took exception to the

Sim 14-6

1 New York Times article?

2 A The mailgram is addressed to Congressman Udall.
3 To the extent that Mr. Gilinsky gets a copy, I think that
4 is a reflection of the fact that he was present at the
5 same time.

6 Q Did you at any time consider sending the mailgram
7 to the full Commission?

8 A I don't think so. It was not a communication
9 to the Commission, and it was not intended to be a communica-
10 tion to the Commission.

11 MS. BERNABEI: I would like to mark for
12 identification as TMIA Exhibit 14 a cover letter to
13 Mr. Dieckamp and what appears to be a draft of the mailgram.

14 (The document referred to was
15 marked TMIA Exhibit 14 for
16 identification.)

17 BY MS. BERNABEI:

18 Q Mr. Dieckamp, if you can, this document comes
19 from your files, does it not?

20 A I think that is right.

21 Q And it appears to be a letter from or a note
22 from a Lee to you concerning the mailgram; is that correct?

23 A Oh, that note came to me just within the last
24 two months as we tried to track down exactly where was I
25 when the mailgram was composed.

INDEXXXXX

Sim 14-7 1

Q Okay. And who is Lee that mentioned in the note on the first page of the mailgram?

2

3

A That is my secretary in Parsippany.

4

Q So this is a note from your secretary to you describing the conditions under which the mailgram was sent; is that correct?

5

6

A Well, it simply says who typed it. I don't know if that is conditions or not.

7

8

Q It is one condition, is it not? Mr. Dieckamp, can you answer the question?

9

10

A Yes, I guess it is one condition.

11

12

Q Okay. Now there is a draft of the mailgram attached to that note, is there not?

13

14

A Yes.

15

Q And this draft indicates that you intended at this time to send the mailgram to all NRC Commissioners, does it not?

16

17

A I think it can be read that way. I don't ---

18

Q There is a carbon copy: NRC Commissioners at the bottom of the page, is there not?

19

20

A Yes.

21

Q Wouldn't that indicate that you intent at the time of drafting this version of the mailgram was to send it all NRC Commissioners?

22

23

A I think it could be interpreted as my intent, but

24

25

Sim 14-8

1 I don't know whether it was or not in the sense that ---

2 Q It says carbon copy: NRC Commissioners, does
3 it not?

4 A Yes, it does, but, you know, if we want to be
5 that way. I didn't type this, but I may have had that
6 on the rough draft. I just don't know.

7 Q Now at some point, assuming that was your
8 intent at the time this was typed, at sometime you changed
9 to send the mailgram only to then Commissioner Gilinsky;
10 is that correct?

11 A I think it is correct that the mailgram only
12 went to Gilinsky.

13 Q Now do you today have any understanding of the
14 reason why you changed from sending a covering copy of the
15 mailgram to all NRC Commissioners to only then Commissioner
16 Gilinsky?

17 A No, I don't have a reason today because I
18 can't reconstruct what might have gone through my mind.

19 Q Would it be because Commissioner Gilinsky had
20 expressed to you any special concern about GPU's failure
21 to report information during the accident?

22 A Again, Commissioner Gilinsky was the only one
23 on the tour with the Congressmen.

24 Q I understand that. What I am asking you was
25 the fact that you sent Dr. Gilinsky a copy of the mailgram

Sim 14-9

1 while not sending it to the other Commissioners indicate your
2 concern -- or his concern about GPU's failure to report
3 information during the accident?

4 A I guess that is conceivable. As I read the
5 New York Times article, Dr. Gilinsky expresses the most
6 concern about the fact that the NRC people didn't inform
7 him. But, you know, there may well have been some conversa-
8 tion with him about the company's notification.

9 Q On pages 12 through 20 of your testimony you
10 discuss the various interviews, specifically of Chwastyk,
11 Mehler and Iljes which have been indicated to be some
12 evidence of site personnel interpreting the pressure spike
13 in terms of core damage; is that correct?

14 A I think maybe I would phrase it which some
15 interpret as evidence, yes.

16 Q And in general your testimony is that this does
17 not rise to the level of some evidence sufficient to question
18 your integrity; is that correct?

19 A That is correct.

20 Q And I believe the testimony here today is that
21 these interviews, at least the ones you discussed in your
22 testimony, are not evidence that anyone interpreted the
23 pressure spike in terms of core damage at the time of the
24 spike; is that correct?

25 A My testimony says ---

Sim 14-10

1 Q No, no. I asking if this is a correct characteri-
2 zation.

3 A My testimony says they do not ---

4 Q Mr. Dieckamp ---

5 JUDGE SMITH: Wait, wait. Both of you stop,
6 please.

7 Disregard the question and ask the question
8 again.

9 BY MS. BERNABEI:

10 Q Is it fair to say that your testimony states
11 that today you do not believe that the Mehler, Chwastyk and
12 Iljes interviews cited are evidence that anyone interpreted
13 the pressure spike in terms of core damage at the time of
14 the spike?

15 A That is not my testimony.

16 Q Okay. Is that your belief today?

17 A It is my belief today that those interviews
18 and that information which is sometimes cited as evidence
19 does not convince me that the mailgram is false.

20 Q Okay. Let me ask the question again, and if
21 you can answer yes or not, please do, Mr. Dieckamp.

22 You cite certain Mehler, Chwastyk and Iljes
23 interviews in your testimony, do you not?

24 A Yes, I do.

25 Q What is your belief today as to whether those

Sim 14-11

1 interviews indicate some evidence of interpretation of
2 the pressure spike at the time of the spike in terms of
3 core damage?

4 A I think one has to, and I have to agree, that
5 perhaps they constitute evidence. The second question is
6 whether the evidence is sufficient to convince me that
7 indeed they understood it, and the answer to that is they
8 do not.

9 Q For a moment, getting back to the words of
10 your mailgram, you state in your mailgram "No one interpreted
11 the pressure spike interms of reactor core damage" is that
12 correct?

13 A On the day of the spike, at the time of the
14 spike, that is right.

15 Q What was the meaning of core damage as you used
16 it in your mailgram?

17 A When I looked at the New York Times article
18 from which this need arose, I got the feeling that the
19 article is saying that the company understood the degree
20 of core damage and that such information would have been
21 very helpful to those making decisions concerning the
22 evacuation.

23 That right there tends to describe for me
24 a degree of core damage, a degree which would have been
25 sufficient to interfere with the ability to positively cool

Sim 14-12

1 the core and thus contain or restrict the degree of the
2 accident. So in that sense it means to me, core damage
3 means to me sufficient mechanical disruption so as to
4 modify or interfere with the ability to positively cool
5 a reactor on a continuing basis.

6 Q Now it is fair to say that today we know that
7 such core damage did exist at 2 p.m. on March 28th?

8 A Yes, that I think is true.

9 Q Now in the sense you used core damage, you
10 used the same words with Mr. Arnold in a conversation with
11 him in the early morning of March 29th, did you not, core
12 damage, at least according to Mr. Arnold's testimony?

13 A There is a wide gamut of meanings for those
14 two words.

15 Q You used those two words, regardless of the
16 meaning, in your conversation with Mr. Arnold to describe
17 TMI-2 on the morning of March 29th, did you not?

18 A But I certainly did not think of them in
19 relationship to the way the New York Times article says
20 it, and I think Mr. Arnold's testimony or deposition also
21 says that he did not think of it in those terms. He thought
22 of it in terms more nearly of failed fuel.

23 Q The same words, not failed fuel, but core damage.

24 A I agree that the two words are the same.

25 Q You also used the words core damage when you

Sim 14-13

1 spoke to Mr. Culler, did you not, of EPRI in requesting
2 EPRI's assistance in assessing the accident?

3 A I have no record that I used those words with
4 Mr. Culler. I have no memory that I used those words
5 with Mr. Culler.

6 Q I think your testimony is you may have.

7 A It is possible that I may have, yes.

8 Q Okay. And those words are not failed fuel,
9 but core damage; is that correct?

10 A Again, I don't know exactly.

11 Q Now you did not use in the mailgram a statement
12 about understanding the degree of core damage, did you? There
13 is no such statement in your mailgram?

14 A No, there is no statement, but I don't think
15 there would be an issue if the degree was trivial.

16 Q If I understand your testimony correctly, and
17 now I am focusing on your prefiled written testimony, pages
18 13 through pages 20, you state that "The interviews of
19 Chwastyk, Mehler and Injes have not convinced you that they
20 understood from the pressure spike that there was core
21 damage," is that correct?

22 A That is correct.

23 Q If I could refer you, first, to Mr. Mehler's
24 interviews, some of which you cite.

25 First of all, is it fair to say that you are

Sim 14-14 1 familiar with all of Mr. Chwastyk, Mr. Mehler and Mr. Iljes
2 interviews on this subject regardless of whether you cited
3 them in your testimony?

4 A I am most familiar with Chwastyk, second most
5 familiar with Mehler and less familiar with Iljes. In the
6 case of Mehler and Iljes, I have taken advantage of those
7 other investigators who have summarized their testimonies.

8 Q Have you at any time prior to today read all
9 of the interviews conducted of Mr. Chwastyk, Mr. Mehler and
10 Mr. Iljes?

11 A I think I have read, or I have read all of the
12 interviews of Mr. Chwastyk that I am aware of. I can't say
13 the same thing with the degree of confidence with respect
14 to Mehler. I know it is not right with respect to Iljes
15 that I have not read all of his testimony.

16 Q And yet you read a substantial enough amount
17 that you feel comfortable with the statements in your
18 testimony; is that correct?

19 A Yes, I do.

20 Q Referring first to Mr. Mehler, the way you
21 viewed his testimony is that you did not believe there is
22 evidence through his testimony that an instruction was
23 given on March 28th not to activate equipment; is that
24 correct?

25 A No, there is evidence to that effect in his

Sim 14-15

1 testimony, but he waivers on that subject as time goes on
2 is my reading of his testimony.

3 Q But is it fair to say that at least in his
4 earlier interviews he affirms and reaffirms that it was
5 March 28th on which an instruction was given not to activate
6 equipment for fear of another explosion?

7 A And in his later testimonies he takes a less
8 positive view.

9 Q Now it is true, is it not, in his interview of
10 May 17th, 1979, his initial NRC interview he states his
11 awareness of the actuation of the containment sprays and
12 talks about believing that the explosion was caused by
13 a spark?

14 A I think that is true. There is a lot of
15 testimony to the effect that operators, including Mehler,
16 tended to correlate the pressure spike with operation of
17 the block valve I think. They were looking for some sparking
18 mechanism as the way to explain the ignition or the setting
19 off of the explosion, whatever caused it.

20 Q Okay. So generally you have understood from
21 Mr. Mehler's interviews that he believed the pressure
22 spike or explosion was caused by a sparking of a gas,
23 that is a non-condensable gas?

24 A No, I don't think that is right.

25 Q A sparking which caused an explosion; is that

Sim 14-16

1 fair to say?

2 A I think that is a lot closer.

3 Q It is true, is it not that in Mr. Mehler's
4 first special inquiry group interview on October 10th that
5 he once again reiterates his understanding of the association
6 of the pressure spike with an operation of the electromatic
7 valve?8 A I don't recall that interview in that level of
9 detail, but I think that my general impression of Mehler
10 is that throughout he continues to think in terms of a
11 fairly strong or a strong correlation between the spike and
12 the operation of some electrical equipment.13 Q He also states, does he not, in this and later
14 interviews that he connected the actuation of the containment
15 sprays and understood the logic of those sprays?

16 A Yes, he does.

17 Q And his understanding is that it would require
18 two independent sensor pressures simultaneously to indicate
19 high pressure to actuate those sprays?

20 A Yes.

21 JUDGE SMITH: Do I understand this exchange
22 now that he believed that it was necessary to have two
23 independent sensors to actuate containment sprays?

24 MS. BERNABEI: That is correct.

25 BY MS. BERNABEI:

Sim 14-17

1 Q And that was in part the basis for his belief
2 that the pressure spike or explosion was in fact a real
3 increase in pressure; is that correct?

4 A I think he relates it to the pressure spike
5 being real. I don't know whether he relates it to a real
6 explosion or not. In fact, my memory tells me that he does
7 not.

8 Q Doesn't he state explicitly in this interview
9 that he believes the instruction not to activate equipment
10 was probably given because they, supposedly his supervisors,
11 believed there was hydrogen?

12 A I am not aware that he says that. I would like
13 to see a citation to that.

14 Q Let me refer you to page 16 of his special
15 inquiry group testimony of October 11.

16 (Pause.)

end Sim

sue fols

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#15-1-SueT 1

WITNESS DIECKAMP: What's the question now?

2

MS. BERNABEI: Let's allow the Board a minute.

3

It's Exhibit 89.

4

(Pause.)

5

BY MS. BERNABEI: (Continuing)

6

Q Mr. Dieckamp, on Page 16 in response to a

7

question, does not Mr. Mehler say that he believes that

8

they were told not to start the equipment shortly after the

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pressure spike and the instruction was given probably be-

10

cause there was hydrogen in there some time after 1:50 p.m.?

11

A Yes, that's what it says here.

12

JUDGE SMITH: When you come to a suitable inter-

13

ruption in your cross-examination we will give Mr. Dieckamp

14

the option as to whether he wants to continue for a while

15

or not.

16

MS. BERNABEI: I can just tell you, I was plan-

17

ning to go through a series of interviews now.

18

JUDGE SMITH: Well, Mr. Dieckamp, you have been

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on all day. Are you ready to quit for the day or can you

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go until perhaps 6 o'clock?

21

WITNESS DIECKAMP: I am prepared to continue.

22

JUDGE SMITH: Okay. We will plan on continuing

23

until about 6.

24

BY MS. BERNABEI: (Continuing)

25

Q Mr. Dieckamp, doesn't Mr. Mehler indicate in his

#15-2-SueT

1 interview he thinks the spike or explosion was caused by
2 a chemical reaction?

3 A Again, I'm not sufficiently familiar with this
4 that I can cite that to you. Is there a citation for that
5 that I could look at?

6 Q Look at Page 15. I believe it's Page 15.

7 A (The witness is looking at a document.)

8 Yeah, I notice on Page 14, he says: I know Joe
9 and I talked about it later on that day, about what could
10 have caused it. And I don't think hydrogen entered into
11 it. We thought maybe some kind of chemical reaction or
12 something happened because it was up and down so quick.

13 Q Could chemical reaction, couldn't that indicate
14 an understanding of a noncondensable gas or hydrogen?

15 A I don't think so.

16 Q What else would chemical reaction indicate to
17 an operator, Mr. Dieckamp?

18 A I just don't know what all he might have had in
19 mind. But I --

20 Q Isn't it true that Mr. Mehler later in this same
21 interview affirms that he believes he received the in-
22 struction concerning -- that is, the instruction not to
23 activate equipment prior to running the reactor coolant
24 pump at approximately 7:20 p.m. in the evening?

25 A Well, doesn't he say something about --

#15-3-SueT

1 Q Mr. Dieckamp, if you could answer my question
2 then you will have a chance to say whatever you would
3 like.

4 A My reaction is that at one point he says: Well,
5 it's too late. I've already done something. I've already
6 started the oil pumps for the --

7 Q Let me go back to my question.

8 A Yes.

9 Q And please listen carefully.

10 A All right.

11 Q Do you remember in Mr. Mehler's interview that
12 he testifies that Gary Miller gave an instruction prior
13 to running of the reactor coolant pumps not to activate
14 equipment in order to avoid sparking?

15 A I think there is general testimony to that
16 effect. I could not be positive about Gary Miller. I
17 couldn't be positive about the time.

18 Again, whatever the testimony says is --

19 Q Would you look at Page 25 and see whether or not
20 he indicates on Page 25 that testimony?

21 A Yes.

22 (The witness is looking at document.)

23 Yes. He relates it to Gary Miller and starting
24 the reactor -- it says here reactor coolant pump. I assume
25 that means primary reactor coolant pump.

#15-4-SueT 1

Q So he does testify that on March 28th prior to starting the reactor coolant pump, presumably in the evening of March 28th, Gary Miller gave an instruction not to activate equipment to avoid sparking?

5 Is that correct?

6 A I think that's essentially right. Yes.

7 Q Okay. Then, Mr. Mehler goes on later, does he not, later in the interview to describe a conversation he had in which he stated to Mr. -- apparently to Mr. Miller: Well, it's too late. I've already stopped the lift and back pumps to prepare for starting the reactor coolant pump?

13 A Yes.

14 Q And doesn't that information indicate to you a concern or information on Mr. Mehler's part about hydrogen or noncondensable gas in the system?

17 A This piece of testimony indicates that he seems to remember that someone else imparted that view to him. Yes.

20 Q And doesn't that -- that was Gary Miller, is that correct? At least, in a portion of his testimony on Page 25?

23 A That's what this appears to be saying, yes.

24 Q It's fair to say Mr. Mehler's testimony indicates a concern on the part of Gary Miller for hydrogen or

25

#15-5-SueT

noncondensable gas in the system?

2 A I'm of the impression that Gary Miller does not
3 sign up for that, so that's --

4 Q I just --

5 A -- why I would hesitate on that. I would be
6 careful --

7 Q I'm just talking about Mr. Mehler --

8 A -- on drawing a conclusion from this one state-
9 ment.

10 Q I'm just talking about Mr. Mehler's testimony.
11 It supports the fact, does it not, that there was concern,
12 presumably of Mr. Miller, that there was hydrogen or non-
13 condensable gas in the system?

14 A Well, it says here: Someone did tell us not to
15 start anything. Someone told us. And I remember telling
16 Gary: It's too late now. I have already started.

17 JUDGE SMITH: Where are you reading from?

18 WITNESS DIECKAMP: That was about Line 15 to
19 17 on Page 25.

20 JUDGE SMITH: Where are you getting this informa-
21 tion about hydrogen or noncondensable gas in the system?

22 MS. BERNABEI: That's the only reason for giving
23 that kind of -- I should perhaps clarify.

24 BY MS. BERNABEI: (Continuing)

25 Q Is it your understanding that the concern about

#15-6-SueT

1 avoiding sparking was a concern about hydrogen or non-
2 condensable gas, a burn or an explosion?

3 JUDGE SMITH: In the system?

4 MS. BERNABEI: In the system, that's correct.
5 In the reactor building.

6 JUDGE SMITH: In the reactor building?

7 MS. BERNABEI: That's correct.

8 BY MS. BERNABEI: (Continuing)

9 Q Is that the --

10 A It is my understanding from a number of inter-
11 views of operators that there is some question about
12 instructions to not operate equipment for fear of the
13 presence of hydrogen in the reactor building. There is
14 some question about just when that instruction was laid on.

15 I guess I do not think I ever saw any testimony
16 that directly correlates that instruction with hydrogen
17 from the pressure spike.

18 Q Is it fair to say that the reason for the
19 instruction, whatever date it was, was concern about
20 hydrogen or noncondensable gas in the reactor building?

21 A I think it was concern about --

22 Q Could you answer my question yes or no? Was
23 the basis for any instruction, regardless of when given,
24 a concern about hydrogen or noncondensable gas in the
25 reactor building?

#15-7-SueT

1 A Yes, it was.

2 JUDGE SMITH: Why are you using noncondensable
3 gas in this context?4 MS. BERNABEI: Because there may have been an
5 understanding other than it was hydrogen. We can stick
6 to hydrogen. That's fine with me.7 JUDGE LINENBERGER: I share the Chairman's con-
8 cern that is reflected in his question. In the first place,
9 hydrogen is condensable, to set that point correctly.10 In the second place, is your concern that there
11 might have been a combustible gas in the system?

12 MS. BERNABEI: That's correct.

13 JUDGE LINENBERGER: Okay. So, is -- or, is it
14 your concern there might have been a noncondensable gas in
15 the system? Which?

16 MS. BERNABEI: That it's combustible.

17 JUDGE LINENBERGER: Thank you.

18 JUDGE SMITH: And you have earlier referred to
19 the -- a system, and now all of your questions are directed
20 toward the containment building or the reactor building?

21 MS. BERNABEI: Right.

22 JUDGE SMITH: Which is, in a sense a system,
23 but it's --24 MS. BERNABEI: No, we are talking about the reactor
25 building.

#15-8-SueT 1

JUDGE SMITH: Now, we are talking about hydrogen or combustible gas in the reactor building --

MS. BERNABEI: That's right.

JUDGE SMITH: -- which is also the containment building.

MS. BERNABEI: That's correct. I understand noncondensable gases though are the ones we are worried about in addition to hydrogen, in terms of being combustible.

That was the basis for my question. I will stick to hydrogen.

BY MS. BERNABEI: (Continuing)

Q Mr. Dieckamp, is it your understanding the basis for the instruction, whenever it was given, not to activate equipment in the reactor building was the possible sparking which might cause combustion of hydrogen?

A I think the testimony indicates that. But, I say I'm not sure the testimony reflects a source of that hydrogen.

Q Is it fair to say that Mr. Mehler's testimony insofar as it indicates an instruction was given on March 28th not to activate equipment in the reactor building is some evidence that site personnel interpreted the pressure spike in terms of production of hydrogen sufficient to cause this concern?

A I don't reach that conclusion from Mr. Mehler's

#15-9-SueT 1

testimony.

2

Q Even though he states that on March 28th after the pressure spike he was given an instruction not to activate electrical equipment in the containment?

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A I read it as the pressure spike only being a matter of time orientation and not a cause and effect relationship.

6

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JUDGE SMITH: In fact, as I understand this line, the pressure spike could not be related as a cause and effect. Presumably the pressure spike, if known to be hydrogen, would have consumed the hydrogen.

9

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12

MS. BERNABEI: Not totally.

13

JUDGE SMITH: Well, that's your concern?

14

MS. BERNABEI: Well, that was their concern.

15

It's not my particular concern. It's their concern that in fact there might still be hydrogen present in the reactor building.

16

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JUDGE SMITH: And still being generated from whatever source --

19

MS. BERNABEI: That's correct.

20

BY MS. BERNABEI: (Continuing)

21

22

Q Mr. Dieckamp, referring you now to Page 15 of Mr. Mehler's testimony, doesn't it in fact state that someone in Mr. Mehler's mind connected the pressure spike to the instruction not to start any pumps, not to do

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#15-10-SueT 1

anything that could give an ignition?

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Specifically, Page 15, starting with the

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question on Line 10. Let me read it to you. The Question:

4

Did you connect the spike with the fact that it just hap-

5

pened after the vent valve had opened? Answer: No, later

6

on, yes. Two days later when everyone became concerned.

7

Yes. Question: But not on the 28th? Answer: We were

8

told someone must have connected it because we were told

9

not to start any pumps, not to do anything that could give

10

an ignition.

11

Now, isn't Mr. Mehler's testimony that someone --

12

not him, but someone -- who gave an instruction not to

13

activate equipment in the reactor building made a connection

14

between the pressure spike and the possible presence of

15

hydrogen in the reactor building?

16

A That's a real mixed bag, that series of questions.

17

Q How about on Line 15 --

18

JUDGE SMITH: Could you restate that question

19

again?

20

MS. BERNABEI: I certainly will. I will read

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the whole thing in the record again.

22

JUDGE SMITH: Fine.

23

BY MS. BERNABEI: (Continuing)

24

Q Starting on Line 10, and this is what I would

25

like you to focus on.

#15-11-SueT 1

A Could we take it in parts, by the way?

2

Q No, I would like to take it as a --

3

A Oh.

4

Q -- series, because I think he answers it that

5

way, Mr. Dieckamp.

6

The Question: Did you connect the spike with the fact that it just happened after the vent valve had been opened? Answer: No. Later on, yes. Two days later when everyone became concerned, yes. Question: But not on the 28th?

10

11

Mr. Mehler's answer, and this is what I would like you to focus on: We were told someone must have connected it, because we were told not to start any pump, not to do anything that could give an ignition.

13

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Now, my question to you is, isn't Mr. Mehler's testimony that someone gave an instruction not to activate electrical equipment in the reactor building because they connected the pressure spike with possible generation of hydrogen in the reactor building?

17

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19

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A I don't think he says that. He says someone must have. He doesn't say someone did.

21

22

Q Okay. Someone must have. That's his understanding of the basis for the instruction, is that not correct?

23

24

A That's what it says here.

25

JUDGE SMITH: What it says is: Two days later

#15-12-SueT 1

2 as I read the exchange was a connection between a spike
3 and the timing of the spike which was just after the vent
4 valve had been opened. That's what the first question says:
5 Did you connect the spike with the fact that it just hap-
6 pened after the vent valve had been opened?

7 And he says: No, but later on, yes. But not
8 on the 28th. And he answers: We were told someone must
9 have connected it.

10 Now, the connected it, the antecedent of connected
11 it being back up to the --

12 MS. BERNABEI: To the pressure spike.

13 JUDGE SMITH: -- spike being connected to the
14 vent valve.

15 MS. BERNABEI: That's correct.

16 JUDGE SMITH: Right.

17 MS. BERNABEI: And then he says -- the cause
18 and relationship comes in when he says: Because we were
19 told not to start any pumps, not to do anything that could
20 give an ignition.

21 The understanding being that the cycling of the
22 valve, or when the vent valve had been opened caused the
23 initial pressure spike.

24 JUDGE SMITH: I understand. Yes.

25 BY MS. BERNABEI: (Continuing)

#15-13-SueT 1

2 Q Mr. Dieckamp, do you know when Mr. Mehler operated
3 the lift pumps and back pumps in order to prepare for operating
4 the reactor coolant pump on the evening of March 28th?

5 A No, I do not.

6 Q Is it fair to say that those pumps, the lift and
7 oil pumps, are in fact activated to prepare for operation
8 of the reactor coolant pump?

9 A I think that's right.

10 Q Therefore, if things were proceeding in the
11 normal course of events he would have activated the lift
12 and oil pumps to prepare prior to operation of the reactor
13 coolant pumps?

14 A Yes, and he did that not knowing that there was
15 any restriction on their operation.

16 Q I'm asking you, do you know for a fact whether
17 or not he in fact operated lift and back pumps to prepare
18 for starting the reactor coolant pumps on March 28th?

19 A I don't know it for a fact, but I think he
20 testifies -- we've just been over it -- where he told Gary:
21 I've already done it.

22 Q Doesn't it also indicate that given the fact
23 that he spoke to Mr. Miller about how he had already done
24 it and there was no longer concern for a spark that the
25 instruction was given at some time prior to his operation
of that equipment?

#15-14-SueT 1

That is, at some time prior to their operation
on March 28th?

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A I guess I would conclude two things, that, yes,
it says the instruction was given. Two, it says the
instruction wasn't generally given.

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end #15 6

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1 Q Mr. Dieckamp, my question to you was given the
2 fact that Mr. Mehler indicated the instruction was
3 outstanding at the time he operated the oil and lift
4 pumps prior to operating the reactor coolant pumps, doesn't
5 that indicate the instruction was given on March 28th?

6 A I am less certain about that.

7 Q No, I am just asking you if his testimony would
8 indicate that.

9 A I am not certain it would, because I think there
10 was a subsequent problem when the pump tripped and had to
11 be restarted, and I guess I am just not sure of that
12 timing. What I am saying is, as I sit here I don't know
13 that that is the only occasion upon which he could have
14 had a basis for correlating those two actions. I just
15 don't know that, that is all.

16 Q It is fair to say that on March 28th he did,
17 in fact, operate the lift and oil pumps in order to start
18 the reactor coolant pump?

19 MR. BLAKE: Objection. Asked and answered.
20 The witness' answer was, he didn't know.

21 JUDGE SMITH: No.

22 MS. BERNABEI: I think he said that there may
23 well have been.

24 JUDGE SMITH: We lost where he is. I thought
25 you had an affirmative answer to your question, and then

1 he gave you an additional answer, but you weren't happy.
2 You should have just kept the answer that you got. But
3 then you asked it in a different way, and I don't believe
4 the witness understood your question on the second time
5 around.

6 But I think Mr. Blake is correct that the
7 question has been asked and answered. But the difficulty
8 is he gave you too much of an answer.

9 So, it is the fact that the instructions were
10 not uniformly distributed that you didn't like, and that
11 is why you asked the question again, is that correct?

12 MS. BARNABEI: No.

13 MR. BLAKE: There is a question on the table,
14 Judge, as to whether or not Mr. Dieckamp knows --

15 MS. BARNABEI: I really resent Mr. Blake
16 restating my question. My question is whether or not
17 Mr. Dieckamp knows of any day other than March 28th when
18 Mr. Mehler operated the vacuum lift pump?

19 JUDGE SMITH : That is the question on the
20 table?

21 MS. BARNABEI: That is the question.

22 MR. BLAKE: That is not what I thought the
23 question was, but let's just have the witness answer it.
24 And get on.

25 WITNESS: Can we have the question one more time,

1 please.

2 BY MS. BERNABEI: (Continuing)

3 Q Do you know of any day other than March 28th
4 in which Mr. Mehler activated the vacuum lift pump in order
5 to prepare for starting the reactor coolant pump?

6 A I have no direct knowledge. I have no memory,
7 as I said here, that would be able to speak to that.

8 Q Is it fair to say throughout his October 11th
9 1979 interview, Mr. Mehler insists that the instruction
10 was given on March 28th? That is uniformly his answer
11 throughout this interview.

12 MR. BLAKE: I am sorry. Is that a statement,
13 or are you asking now Mr. Dieckamp to review the entire
14 statement.

15 MS. BERNABEI: He discusses this particular
16 interview. He discusses a number of interviews. He
17 said he reviewed them, and I have given the representations
18 on what these interviews represent. I am entitled to
19 question him on those portions that he has not chosen to
20 include in his analysis of these interviews.

21 WITNESS: I don't think I discuss this specific
22 interview. I think I say that Mr. Mehler's testimony --

23 MS. BERNABEI: Objection.

24 Court Reporter: Excuse me. No more cross talk,
25 please.

1 MS. BERNABEI: I understand there is no
2 pending question.

3 JUDGE SMITH: There is no pending question?
4 Then there is nothing for us to rule on.

5 MS. BERNABEI: I will restate the question.

6 BY MS. BERNABEI: (Continuing)

7 Q In your October 11, 19 -- excuse me. Mr.
8 Mehler's October 11, 1979 interview with the Special
9 Inquiry Group, he insists throughout that he received
10 this instruction not to activate equipment in the reactor
11 building on March 28th, does he not?

12 MR. BLAKE: My objection is, you are asking
13 him about a Mehler October 11, 1979 interview, and you
14 want him to characterize what it says throughout the
15 interview. Is that what you are asking the witness?

16 MS. BERNABEI: The entire interview. My
17 specific representation is Mr. Dieckamp says that his
18 reading of this testimony, Mehler's testimony, indicates
19 to him that Mehler is uncertain about the timing of
20 equipment limitation.

21 WITNESS: Ms. Bernabei, that is all of Mehler's
22 testimony. My composite impression, not just from
23 October 11th.

24 BY MS. BERNABEI: (Continuing)

25 Q I am just talking about October 11th.

1 A I am not in a position to characterize his
2 October 11 testimony. It may be as you say. I am just
3 not sure.

4 My impression from looking at all of this --
5 my impression from looking at all of his testimony is
6 that he becomes uncertain about this question.

7 JUDGE SMITH; Uncertain as to day, as well as
8 hour?

9 WITNESS: Yes.

10 BY MS. BERNABEI: (Continuing)

11 Q All right. I would like you not to review
12 the October 11, 1979 testimony, and state whether or not
13 he consistently throughout that testimony states March
14 28th was the date on which he received that instruction.

15 JUDGE SMITH: That is 58 pages. 59 pages of it.

16 MS. BERNABEI: I think Mr. Dieckamp knows the
17 answer without reviewing it.

18 JUDGE SMITH: You are just asking him to review
19 it.

20 MR. GOLDBERG: In my opinion, it speaks for
21 itself.

22 MS. BERNABEI: It seems to me this man has
23 offered testimony, his reading of the testimony indicates
24 Mehler is uncertain about the timing. I think we are
25 entitled to establish Mehler is not uncertain as to the

1 timing.

2 JUDGE SMITH: Well, Mehler will be here.

3 MS. BERNABEI: That doesn't mean that we can't
4 impeach this witness by his testimony.

5 You know, we objected originally to Mr.
6 Dieckamp's discussion of these interviews. We objected,
7 the Board said no, this is the man that charged the line,
8 he should be allowed to analyze it.

9 I think, therefore, we should be allowed to
10 cross examine and attack his analysis, that is not
11 supported by the underlying interviews.

12 JUDGE SMITH: Right, and we are allowing you
13 to do that, and that is what you have been doing most
14 of the afternoon, but not you are -- you run into a big
15 problem here, and that is you are asking him to characterize
16 a large piece of interview -- it looks more like an interview
17 -- and categorically eliminate from it any possibility
18 that he was referring to a date other than the 28th, is
19 that what you are doing?

20 MS. BERNABEI: That is correct.

21 JUDGE SMITH: It seems like a sloppy procedure.
22 I appreciate what you are trying to do. Let's see if we
23 can come up with a better way of doing it.

24 MS. BERNABEI: It seems to me this man has
25 presented testimony, and if there is no basis for it then

1 he should say it.

2 If he doesn't know the basis for it, fine.

3 JUDGE WOLFE: Why don't you, I think, Judge
4 Smith is correct. If the document is 57 pages long,
5 you can precisely target what you know is in that
6 document, and you say, you ask the witness in light of
7 this specific page number, isn't it a fact that -- and
8 go on from there.

9 Let's not have him stand 57 minutes reading
10 57 pages.

11 MR. GOLDBERG: And she has already asked the
12 witness the question. She got his best answer. She
13 can certainly impeach him with the document itself, and
14 with Mr. Mehler's testimony when he is here.

15 JUDGE SMITH: Well, she has a particular
16 problem that I think we should be sympathetic to -- with,
17 and that is, it is her view that the context of all these
18 interviews is that -- or at least this interview, is that
19 there is no uncertainty.

20 So, she is trying to establish a negative, and
21 it is -- no, she is not. She is trying to establish a
22 certainty, and it is very hard to do to establish that
23 there is no part of the document inconstant with her
24 view of it. That is very hard to do.

25 You have undertaken a difficult task. So your

1 purposes are legitimate, but you are going to have to come
2 up with a better way of doing it.

3 BY MS. BERNABEI: (Continuing)

4 Q I refer you to page 13 of that interview.

5 MR. BLAKE: Ms. Bernabei, I wonder if I could
6 make a suggestion. You are the only one who can estimate
7 whether or not Mr. Dieckamp will be done today. It does
8 not look like he will be. Why isn't that an assignment
9 for him overnight to take a look?

10 JUDGE SMITH: Well, I don't even like to
11 burden him with that, reading 59 pages. You know, I
12 don't think it is his job. Well, maybe it will boil
13 down to that is the only way it can be done.

14 MR. BLAKE: It sure beats sitting here while
15 he reviews all the pages. That was my --

16 JUDGE SMITH: Almost anything beats that.

17 WITNESS: Judge Smith, may I comment on what
18 I thought I already said. I thought earlier on --

19 JUDGE SMITH: Maybe he can be helpful.

20 MS. BERNABEI: There is no pending question.
21 I am trying to -- I don't think the witness should be
22 allowed to give speeches to the Board. If there is no
23 pending question -- I am attempting to reconstruct my
24 questioning in accordance to Judge Wolfe's suggestion.

25 JUDGE SMITH: It is your problem, and if he has

1 a solution to it, and he can go to it -- let's hear from
2 him. I want to hear from him.

3 WITNESS: I thought that earlier on in this
4 section on this subject, that I had said that Mehler
5 starts out identifyint the equipment limitation on the
6 28th, and ends up towards the latter parts of his
7 interviews becoming uncertain about what date.

8 And I think my testimony only says that he
9 becomes uncertain, or he is uncertain. I do not cite
10 the October 11 testimony in any specific way.

11 It may be that this one has him still thinking
12 in terms of the 28th. I am only saying that as you go further
13 through his testimony, you find that he reflects
14 uncertainty.

15 JUDGE SMITH: Through other testimony, or
16 through this --

17 WITNESS: No, further on. He next is interviewed
18 on October 11th, and then he is interviewed, I think,
19 in the Fall of '80 by the NRCI I&E people, and as one
20 threads through these things, I reach the conclusion
21 that he is less certain about this.

22 JUDGE SMITH: I think we are going to have to
23 be practical about it. On the one hand, Mr. Dieckamp having
24 made the statement that it becomes less certain, it
25 certainly is a legitimate area for you to inquire.

1 At the same time, we accepted Mr. Dieckamp's
2 testimony. Not so much for the truth of what he believed
3 -- the truth of Mr. Mehler's statements, but as to what
4 he perceives Mr. Mehler's statements. And that is, of
5 course, appropriate for you to touch upon. Now you
6 call upon him: Now, justify that statement.

7 Well, as a practical matter I don't know how
8 we are going to do that. Apparently there were a lot
9 of interviews, and he has read them through and he believes
10 it becomes less uncertain. I think that we can move along
11 and justice be served if we develop whether or not Mehler
12 is certain or uncertain based upon Mehler's own testimony.

13 MS. BERNABEI: It seems to me that he is being
14 offered in some kind of analyzer of all these interviews.

15 JUDGE SMITH: Who? Dieckamp?

16 MS. BERNABEI: Sure.

17 JUDGE SMITH: You bet.

18 MS. BERNABEI: That is right. And it is his
19 characterization, the distortion of the record. It seems
20 to me we are entitled to point that out, and we are
21 attempting to do that by pointing out specific interviews
22 and specific statements in the interviews which show that
23 that is a distortion of the record.

24 JUDGE SMITH: Well, all right. That is another
25 matter. If you have specific parts of the interview,

1 and then -- that is okay.

2 MS. BERNABEI: What I was trying to do was
3 in accordance with Judge Wolfe's suggestion.

4 JUDGE SMITH: But then we go on, he says: Well,
5 maybe this one doesn't, but he has read a lot of them. I
6 don't know.

7 MR. GOLDBERG: Chairman Smith, Mr. Dieckamp has
8 stated his reading of the succession of interview that
9 Mr. Mehler has given on this subject, and I understand
10 that TMIA does not necessarily agree with Mr. Dieckamp's
11 interpretation of how the uncertainty became greater as
12 time went by, and further interviews accumulated on
13 further interviews.

14 However, I don't know whether all of them,
15 but certainly a lot of these interviews are a part of the
16 joint stipulation, and Ms. Bernabei can cite them to
17 support her argument that Mr. Dieckamp is wrong, that he
18 didn't become more and more uncertain.

19 And I don't know why -- if they are testing
20 Mr. Dieckamp's reading of those and his opinion and he
21 stand by it, why she can't impeach him to the extent she
22 wants with the interviews themselves, which are
23 evidence.

24 MS. BERNABEI: That is what I am trying to do.
25 We have a right to cross examine this witness on the

1 basic -- this is the gist of his testimony today, that
2 he still does not think there is much evidence, and he
3 points to these interviews, distorts what they say, and
4 we are not entitled to cross examine him.

5 JUDGE SMITH: Nobody ruled that. We are
6 searching for a practical, reliable way that you can
7 accurately test his perception. And toward the end of a
8 reliable and complete record. And I don't know what it is
9 yet.

10 It certainly is not for the Board to read all
11 these to see if he distorts it. It certainly is not for
12 him to sit here this afternoon and read them all, and
13 come up with justification. I don't know.

14 Mr. Goldberg's idea has some merit, that you
15 cite portions consistent, and you impeach him that way.
16 I am only looking for a practical solution.

17 MS. BERNABEI: Well, what I was going to propose,
18 adopting Judge Wolfe's suggestion, that I cite particular
19 part of the interviews. I think it is incredible that
20 this Board would foreclose cross examination of major
21 witness --

22 JUDGE SMITH: We have not foreclosed cross
23 examination; therefore, it is not incredible that we have
24 foreclosed cross examination. We are working very hard
25 with you to try to develop cross examination, and we are

1 not foreclosing it.

2 MS. BERNABEI: I understand. What I am talking
3 about is Mr. Goldberg's suggestion that that would be
4 appropriate, that we can argue what we want in our
5 brief.

6 This is the gist of Mr. Dieckamp's testimony.

7 MR. GOLDBERG: That is exactly the appropriate
8 way to impeach a witness. You lock him into a position,
9 and if you have evidence that contradicts it, you put it
10 in the record and you will make your arguments, and that
11 is all I am suggesting. You have tested him, and tested
12 him and tested him, and he maintains that the uncertainty
13 becomes greater as the interviews proceed.

14 JUDGE SMITH: Why don't we proceed. Some time
15 this evening, and you confront Mr. Dieckamp for a
16 limited time, and see where we go, with statements that
17 you perceive be inconsistent with his conclusion. But
18 we will have to put a practical limitation on it.

19 Incidentally, when I was inquiring about the
20 time, I had read my watch to be one hour later than it
21 really is. That is how I perceive time moving.

22 You want to approach it that way.

23 BY MS. BERNABEI: (Continuing)

24 Q On page 15 of Mr. Mehler's October 11, 1979
25 testimony, he states, does he not, that the instruction

1 not to activate equipment in the reactor building was
2 given on March 28th?

3 A Line 19.

4 Q On page 16, he repeats that, does he not, in
5 stating on the first answer on that page that the
6 instruction was given some time after the pressure spike
7 occurred, because they assumed it would happen again?
8 I am referring now to Page 16, lines 3 through 6.

9 JUDGE SMITH: All right.

10 BY MS. BERNABEI: (Continuing)

11 Q Mr. Dieckamp?

12 A Yes.

13 Q I refer you now to Page 24. Did Mr. Mehler,
14 near the end of the page, Line 21, not affirm once again
15 that the instruction was given on March 28th?

16 A Yes, he does.

17 Q Doesn't he affirm, on that same page, in
18 a Question: Why are you so sure? Doesn't he explain,
19 yes, it was the 28th, and ~~it was~~ because it was prior
20 to the reactor cooling pump starting?

21 A Yes.

22 JUDGE SMITH: Isn't it unlikely that in this
23 interview, in the beginning to end of it in a matter of
24 presumably less than a few hours, that he is likely to
25 be consistent in his memory that the order was given on

1 the 29th.

2 Mr. Dieckamp has alluded to the possibility
3 that it was later interviews that supports his conclusion
4 that Mehler became increasingly uncertain.

5 I think that you have established from selected
6 points here, that probably throughout this interview he
7 is putting it on the 28th. And, as a matter of fact,
8 lets say that is the case unless Mr. Blake wishes to
9 develop it to the contrary when Mehler comes.

10 I really am not sure that this is the best
11 approach. Can you go to, say, -- jump to the last
12 interview and see if you can, for example -- how many
13 interviews are there, by the way, and depositions?

14 MS. BERNABEI: I think there is five all
15 together of Mr. Mehler.

16 JUDGE SMITH: All right. Take for example --
17 take the last one. Can you go to that one, and demonstrate
18 question and answers in which it is apparent that he is
19 still certain about the order being given on the 28th?

20 MS. BERNABEI: No.

21 JUDGE SMITH: No?

22 MS. BERNABEI: No, but I think I am entitled
23 to impeach the witness through the documents to show that.
24 I don't have to present the licensee's evidence to
25 support it. I am trying to show Mr. Mehler on certain

1 occasions was very certain about it.

2 JUDGE SMITH: And I don't think that is in
3 dispute by Mr. Dieckamp or licensee that --

4 MS. BERNABEI: It apparently was, because Mr.
5 Dieckamp would not answer the question whether or not
6 Mr. Mehler insisted throughout that interview that the
7 instruction was given on March 28th.

8 JUDGE SMITH: Well, you have pointed out
9 several times in this deposition that Mr. Mehler was
10 definite about the 28th. So, I think that with respect
11 to this document, the ball is now in Mr. Dieckamp's court.

12 Now, I am suggesting that you go on to later
13 interviews, if you can, and do the same thing.

14 I mean, granted it is not the classic cross
15 examination, but the classic cross examination would keep
16 us here forever, and I am really trying to help you.

17 MS. BERNABEI: I understand. Okay. I will go
18 on to a later interview.

19 JUDGE SMITH: Right now, you have made it on
20 this one unless they come back.

21 End 16.
22 MS fols.

23

24

25

Sim 17-1

BY MS. BERNABEI:

1
2 Q On October 30, 1979, a special inquiry group
3 interviewed Mr. Mehler. Do you have that before you?

4 A No, I do not.

5 JUDGE SMITH: Well, not only that, but we may
6 even move along a little bit faster and we don't have to
7 perhaps make Mr. Dieckamp agree each time. If you will just
8 zero right in on the language, we can all be reading it
9 and somebody can say, okay, gotcha, and move to the next one.

BY MS. BERNABEI:

10 Q Okay. On pages 11 and 12 I will read to you
11 what Mr. Mehler says. He was asked about -- I will read
12 a question on page 11, line ---

13 JUDGE SMITH: Do you want to give a citation
14 other than the ---

15 THE WITNESS: I think I want to see it.

16 MS. BERNABEI: October 30th, 1979.

17 JUDGE SMITH: All right. Go over there with
18 him.

19 (Ms. Bernabei takes the document over to show
20 the witness.)

21 (Pause.)

22 JUDGE SMITH: He prefers to have counsel do it.
23 Is that your preference? I just want to get a quantity of
24 these things and move along. So whatever way you can do
25

Sim 17-2

1 that efficiently would be the better way.

2 MR. BLAKE: The interview we are now referring
3 to would be 98 in the Joint Mailgram Exhibit.

4 JUDGE SMITH: All right, that is fine, 98.

5 MR. BLAKE: I will plan to bring two extra
6 copies of the Joint Mailgram Exhibit tomorrow, and the
7 next time I will wait and distribute them at the time of the
8 hearing rather than trying to hand them out in advance. I
9 will try and bring two extras tomorrow to alleviate this
10 problem.

11 The page number again, please, Ms. Bernabei?

12 MS. BERNABEI: Page 11, line 17.

13 BY MS. BERNABEI:

14 Q "Question. In your interview with Mr. Mehler on
15 October 11th you talked about receiving an instruction not to
16 start the oil pumps or other electrical equipment that might
17 cause a spark and your response to it.

18 "First of all, I would like to ask you to recount
19 everything you can about the conversation and then we will
20 go to the question of when you think it may have occurred.

21 "Answer: At some time there were instructions
22 given in the shift supervisor's office not to start anything
23 electrical, and previous to that I was trying to check out
24 the oil lift system on the reactor coolant pumps, the
25 oil pumps, the back-stop pumps, et cetera for the reactor

Sim 17-3

1 coolant pumps.

2 "Question: Those are the pumps that would be necessary
3 to run a reactor coolant pump?

4 "Answer: That is correct."

5 That is correct, is it not, Mr. Dieckamp?

6 JUDGE SMITH: What is the date? Did I miss
7 it?

8 BY MS. BERNABEI:

9 Q Now it is your testimony, is it not, that you
10 do not know of any date other than March 28th that Mr. Mahler
11 operated the lift and oil pumps in preparation for operating
12 the reactor coolant pumps?

13 MR. BLAKE: Objection. That is a mischaracteriza-
14 tion of the witness' prior testimony.

15 MS. BERNABEI: Well, I asked him, do you know
16 of any date or than March 28th when Mr. Mehler operated
17 the oil and lift pumps prior to operating the reactor coolant
18 pump.

19 THE WITNESS: As I sit here, I don't recall that,
20 but I would like to have you read a little bit more of
21 this.

22 JUDGE SMITH: Assuming that his answer is no,
23 does that command the inference that you would have us
24 draw that if he knows of no other day in which Mr. Mehler
25 was told not -- that the two pumps came up, does that command

Sim 17-4

1 the inference then that the conversation must have referred
2 to the 28th?

3 MS. BERNABEI: Yes, because there is no other
4 evidence on the 29th or 30th that Mr. Mehler operated those
5 pumps.

6 JUDGE SMITH: That is a non-sequitur. I think
7 you had better go to dates.

8 THE WITNESS: Dates come up on the next page.

9 MS. BERNABEI: Mr. Mehler's testimony is that
10 his conversation and the instructions given prior to his
11 operation of the oil and lift pumps, that that was done
12 prior to starting the operation of the reactor coolant pumps.

13 The only record of his operating those pumps
14 is on March 28th.

15 JUDGE SMITH: The only record, right, okay. I
16 understand that. That does not mean, however ---

17 MS. BERNABEI: If they can provide information
18 that Mr. Mehler did this on some other date, fine.

19 THE WITNESS: May I simply read the next few
20 lines of the same stuff?

21 MS. BERNABEI: There is no pending question.

22 THE WITNESS: Ms. Bernabei, would you read the
23 next few lines that go onto the next page?

24 JUDGE SMITH: Well, what are the next few
25 lines?

Sim 17-5

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THE WITNESS: They refer to March the 29th.

JUDGE SMITH: Do they?

MS. BERNABEI: Do you want me to read them in?

Well, I think we should read a whole portion of the deposition. I would prepose that we read a great deal of it. If we going to go on reading testimony that the witness wants in, I think we should read a great deal of it into the record at this point. I don't think it is appropriate for the witness to be giving directions as to what portions of the interview should go in the record.

JUDGE WOLFE: Well, what the Board had in mind and what I certainly had in mind, Ms. Bernabei, was not a selective reading from the deposition. I thought it would be a fair reading from the deposition to establish our premise and not a selective reading.

MS. BERNABEI: It is. That is a fair reading.

JUDGE WOLFE: It is not a fair premise in that I understand from the witness that two lines later there is a date appearing, a spoken date of March 29th. If that is not a selective reading from the deposition, why ---

MS. BERNABEI: I will continue reading. I mean what I will do is read the portions -- I don't think it is appropriate for the witness to be arguing to the Board, first of all. But since you are allowing this, let me read in what I think supports our position as well as

Sim 17-6

1 what Mr. Dieckamp wants read in.

2 MR. BLAKE: But you do think it is fair to
3 get all the evidence before the Board, do you not?

4 MS. BERNABEI: This is before the Board and I
5 think you are completely capable, Mr. Blake ---

6 JUDGE WOLFE: Well, no, because I was relying
7 on you to pinpoint directly from your reading from the
8 deposition into the record, and that is the reason I
9 suggested it.

10 Now let's get with it and read not selectively
11 and have the witness answer the question.

12 MS. BERNABEI: I will start at the top of page
13 11 and I will get to the part Mr. Dieckamp suggested.

14 "Question on line 4: Did you in your own mind
15 or in conversations with Mr. Chwastyk connect the possibility
16 of an explosion with the opening or closing of the PORV
17 block valve?

18 "Answer: That I don't know. It was associated
19 with that some time later. I don't know if it was that
20 day or the next day that that is what could have been the
21 source."

22 "Question: What do you remember about your
23 conversation with Joe Chwastyk?

24 "Answer: We were both highly concerned and
25 really a little scared, but it happened and it was over

Sim 17-7

1 with and there was nothing we could do any more and we were
2 not concerned with trying to get the core stabilized."

3 MR. BLAKE: I am sorry. She skipped a portion
4 of the transcript in reading it probably inadvertently.

5 MS. BERNABEI: Oh, well, I will read the
6 whole question.

7 "Question: What do you remember about your
8 conversation with Joe Chwastyk? Were you guys pretty
9 upset about this or were you puzzled? How would you
10 characterize the conversation?

11 "Answer, line 13: We were highly concerned and
12 really a little scared, but it happened, it was over with
13 and there was nothing we could do about it any more, and
14 we were more concerned with trying to get the core stabilized."

15 We then go into the question and answer which
16 I just read with Mr. Dieckamp. I will repeat it.

17 "Question on line 17: In your interview on
18 October 11 you talked about receiving an instruction not
19 to start the oil pumps or other electrical equipment that
20 might start a spark and your response to that.

21 "First of all, I would like to ask you to recount
22 everything you can about that conversation, leaving aside
23 the day and time that it may have occurred and then we will
24 get to the question of when you think it may have occurred.

25 "Answer: At sometime there were instructions

Sim 17-8,
1 given in the shift supervisor's office not to start anything
2 electrical, and previous to that I was trying to check
3 out the oil lift system on the reactor coolant pumps, the
4 oil pumps, the back-stop pumps, et cetera, for the reactor
5 coolant pumps.

6 "Question: Those are the pumps that would be
7 necessary?

8 "Answer: To run?

9 "Question: To run a reactor coolant pump?

10 "Answer: That is correct. So when the
11 instruction was given not to start any more equipment, I
12 informed them that I have already tested them all. And the
13 comment was made then well, then, I don't see -- I don't
14 think we have anything left in the building. Now what date
15 that was, I don't know.

16 "Question: When you say the instruction came
17 out of the shift supervisor's office, do you remember who
18 was in there at the time?

19 "Answer: I believe the instruction came from
20 Gary Miller.

21 "Question: From Gary Miller?

22 "Answer: I believe.

23 "Questions: You pretty much remember it was?

24 "Answer: And I believe I answered him, I have
25 already started the pumps and it is all over with.

Sim 17-9

1 "Question: Do you recall saying that to him?

2 "Answer: Yes.

3 "Question: So you recall someone saying well,
4 if it. . . " -- and I am missing a page here.

5 "So if you recall someone saying well, if it
6 going to happen, it would have happened already?

7 "Answer: Yes, in effect.

8 "Question: Do you recall the substance?

9 "Answer: I don't remember him mentioning
10 hydrogen at that time. Since the seven months have gone by
11 the word enters into every discussion.

12 "Question: Do you remember whether you were
13 the one who said that or Gary Miller said that?

14 "Answer: I don't remember. I don't believe
15 I did at that time.

16 "Question: Do you remember whether other people
17 around you were aware of the instructions?

18 "Answer: I believe. I don't know who all
19 was at that time. There were other people in the room. They
20 would have been aware of the instructions.

21 "Question: Going to the question of when this
22 instruction and conversation occurred, let me ask you this.
23 When you were interviewed on October 11 you think, as you
24 said, before we started today, you were fairly clear in
25 your own mind that you thought this happened on March 28th?

Sim 17-10

1 "Answer: That is correct.

2 "Question: What were the things in your
3 recollection that made you think this was on the 28th?

4 "Answer: Because I remember starting the
5 lift pumps and the back-stop pumps on March 28th.

6 "Question: Which would be a precedent to
7 starting the reactor coolant pump?

8 "Answer: That is correct, and we did start
9 one on the 28th. We have also started lift pumps on the
10 29th, too.

11 "Question: Do you remember what it was that
12 made it necessary to start a reactor coolant pump on the
13 29th?

14 "Answer: We didn't start one that I remember
15 on the 29th, but we were making plans in case the one that
16 was running tripped or malfunctioned and we would have
17 a backup one available.

18 "Question: Do you know what time that was on
19 the 29th from records or other conversations?

20 "Answer: No, I don't.

21 "Question: When were you in the control room
22 approximately on Thursday the 29th?

23 "Answer: I believe I was on the swing shift
24 which would have been the 3 to 11 shift.

25 "Question: 3 to 11?

Sim 17-11

1 "Answer: Yes, and I arrived somewhat early
2 that day. I don't know if it was one o'clock, but most
3 of us were working, you know, coming in a couple of hours
4 early and staying a couple of hours late.

5 "Question: During the period would you have
6 been the shift supervisor in charge of the control room
7 or the panels?

8 "Answer: Well ---

9 "Question: Was that the way the thing was
10 set up at the time?

11 "Answer: The first three days there were more
12 than one of us there. I was in charge, just like the
13 other gentleman that was there, and I don't know who that
14 would have been at the time. There were quite a few jobs
15 going on and it was more than one man could handle.

16 "Question: Since the interview that our group
17 did with you on October 11, as indicated by Mahler Exhibit
18 No. 2, you have become less certain that this instruction
19 in the conversation you had with Mr. Miller was on
20 Wednesday the 28th?

21 "Answer: That is correct.

22 "Question: What is it that has caused you
23 to doubt the recollection that you had before?

24 "Answer: I have talked to some people that
25 were there on the 28th and also thinking back upon it, you

Sim 17-12 1 know, I cannot be certain that it did happen on the 28th.

2 "Question: In talking with other people, let
3 me ask you, who did you talk to about it?

4 "Answer: I have talked to Gary Miller, Mike
5 Ross, Joe Chwastyk, Bill Bill Zewe and none of them recollect
6 that instruction being given on the 28th.

7 "Question: Do any of them recollect such an
8 instruction being given on the 29th?

9 "Answer: I don't think they would say specifically
10 that it happened on the 29th either, but I do believe some
11 of them recollect it being given.

12 "Question: Do you remember which ones?

13 "Answer: I think Joe does.

14 "Question: Any of the other people?

15 "Answer: I don't know.

16 "Question: In your conversations with them,
17 what is it that you have said that has made you think that
18 your recollection is probably wrong that it was the 28th?

19 "Answer: Well, they would have been in the room
20 the same time I was to hear the instruction and it seems
21 funny if I would be the only one that remembered
22 it happening on the 28th when there were other people in
23 the room that don't remember it.

24 "Question: So this is in part conversations
25 with other people that you have had and in part sort of a

Sim 17-13

1 general reconstruction of events that made you think that
2 you are wrong in thinking it was the 28th; is that fair
3 to say?

4 "Answer: That is fair to say, and also, you know,
5 quite a bit happened the 28th and I did come back the 29th.
6 It could very well have been the 29th, and I wouldn't even
7 say for certain it was the 29th right now.

8 "Question: It is conceivable it could have been
9 the 30th?

10 "Answer: I wouldn't want to get definite and
11 say it was, you know. I am just not certain right now
12 which day it was.

13 "Question ---

14 JUDGE SMITH: All right. We have heard enough
15 to know that there is at least some basis for Mr. Dieckamp's
16 testimony that ---

17 MS. BERNABEI: I don't disagree with that.

18 JUDGE SMITH: You are not?

19 MS. BERNABEI: I am saying that the characteriza-
20 tion in his testimony of the testimony of overall is not
21 correct, and that is what I am tr ing to get at. I don't
22 deny that there is some scintilla of ---

23 JUDGE SMITH: All right. Do you want to move
24 on to another subject then?

25 (Pause.)

Sim 17-14

1 JUDGE SMITH: Or do whatever you want to do.
2 You don't have to go on to another subject if you want to
3 pursue this one.

4 JUDGE WOLFE: In fact, that was my suggestion
5 to you. But if you are satisfied with just going to the
6 latest deposition and reading from that, fine. I mean
7 you are handling your case.

8 MS. BERNABEI: I understand. Thank you.

9 JUDGE SMITH: Well, I think we plan on closing
10 or adjourning this evening at 5:30. So if you could plan
11 your cross-examination accordingly.

12 MS. BERNABEI: Sure.

13 BY MS. BERNABEI:

14 Q Now you have not noted in your testimony, have
15 you, the testimony of Mr. Iljes, that he remembers a discussion
16 about hydrogen on the evening of March 28th?

17 A Towards the bottom of page 13 I thought I did.

18 Q Did you say that he remembers such a discussion,
19 that he remember such a discussion in two interviews and not
20 only his May 23rd, 1979 interivew, but his NRC interview
21 of September 24th, 1980?

22 A I don't know whether he does or not, but ---

23 Q You didn't make mention of that in your testimony,
24 did you?

25 A No. I state simply that he recalled a hydrogen

Sim 17-15 1 explosion at the same time that he was removing the pressure
2 spike chart from the recorder, which fact of itself is
3 inconsistent with the physical evidence or data.

4 Q He also states, does he not, that he remembers
5 a discussion of hydrogen, and he says that separately from
6 the Xeroxing of the pressure chart on the evening of
7 March 28th? I am talking now about his testimony which
8 you cite of May 23rd, 1979.

9 (Pause.)

10 Do you understand the question?

11 A Let me have it again.

12 Q Sure. He states that there was a discussion
13 of hydrogen and does not link it necessarily to Xeroxing
14 of the pressure spike on the evening of March 29th; is that
15 not correct?

16 A Wait a minute now. What I characterize as
17 his testimony of May the 23rd where in my reading he
18 identifies the time of this discussion about hydrogen with
19 his concurrent action of removing the chart in order to
20 Xerox it.

21 Q Okay. He does not specifically in his testimony
22 link those two events, that is, he does not indicate he
23 knows the time for discussion of the hydrogen explosion
24 from his understanding of the time of Xeroxing the chart,
25 does he?

Sim 17-16

1 A That is my reading of it.

2 Q I would like to refer you to page 6 of
3 Mr. Iljes' May 23rd, 1979 interview.

4 A Okay

5 JUDGE SMITH: Could you give us a number?

6 (Pause.)

7 MR. BLAKE: We have too many books out. We can't
8 find the number.

9 (Pause.)

10 MS. BERNABEI: It would be listed in chronological
11 order on the stipulation.

12 JUDGE SMITH: I think we have identified it on the
13 index.

14 MR. BLAKE: It is No. 36, I believe.

15 JUDGE SMITH: But we don't have 36 in our books.

16 (Pause.)

17 JUDGE SMITH: Item No. 36.

18 MS. BERNABEI: Here is Item No. 36. We are
19 talking now about page 6, Item 36.

20 (Pause.)

21 BY MS. BERNABEI:

22 Q Now there is a mention on page 6, is there not,
23 of Mr. Iljes' member of a discussion of a hydrogen explosion
24 on March 28; is that correct?

25 A Yes.

Sim 17-171

Q Now Mr. Iljes in his statement back on that page does not link that with the time of Xeroxing the pressure chart, that is he does not depend on the time of Xeroxing the pressure chart to derive his conclusion on page 6?

A On page 6 I do not see a discussion of the Xeroxing time.

Q He did not in fact rely on Xeroxing of the pressure spike to indicate the time of the discussion of hydrogen, does he?

A It is not on page 6. I believe he does otherwise because I have checked that citation several times to be sure that I was properly characterizing it.

JUDGE SMITH: I think in fairness, Mr. Dieckamp, Mr. Iljes -- the basis for your characterization of Mr. Iljes' testimony should be clarified.

THE WITNESS: More explicitly, in more detail.

JUDGE SMITH: So that your inferences that you draw -- so that we can look at it and see if we draw the same inferences so you can be cross-examined on it.

You seem to have done that on the others, but I think with respect to this statement that there is a failure of a citation. But I think we can do that tomorrow morning perhaps.

So what do you say we adjourn tonight?

#18-1-SueT 1

MS. BERNABEI: Let me ask one more question
2 along that line, the very same question.

3 JUDGE SMITH: Okay.

4 BY MS. BERNABEI: (Continuing)

5 Q On Page 10, Mr. Dieckamp, it's mentioned there
6 again a discussion, is there not, between the investigator
7 Mr. Illjes about a discussion of hydrogen burn and again
8 Mr. Illjes' answer on Lines 10 and 11 do not indicate, do
9 they, a linkup between the time of the discussion and the
10 pressure spike?

11 I'm referring now to Page 10, his answer on
12 Lines 10 and 11.

13 A On Lines 10 and 11, there is not. However,
14 higher up on that page, the first few lines of the page,
15 there is a reference to the timing in relationship to
16 the chart removal.

17 JUDGE SMITH: Would this be a good point to
18 break, then?

19 MR. BLAKE: Can I get, for purposes of other
20 witnesses and my own preparations tonight, an estimate
21 of the time that we now have yet with Mr. Dieckamp so I
22 know where we are going tomorrow?

23 JUDGE SMITH: Do you need this on the record?

24 MR. BLAKE: No.

25 JUDGE SMITH: All right. We will adjourn until

#18-2-SueT 1

9 a.m. tomorrow.

2

(Whereupon, the hearing is adjourned at

3

5:31 p.m., Monday, November 19, 1984, to resume at 9:00 a.m.

4

on Tuesday, November 20, 1984.)

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ENDDDDDD

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CERTIFICATE OF OFFICIAL REPORTER

This is to certify that the attached proceedings before the
UNITED STATES NUCLEAR REGULATORY COMMISSION in the matter of:

NAME OF PROCEEDING: In the Matter of Metropolitan Edison Company,
Three Mile Island Nuclear Station, Unit No. 1.

DOCKET NO.: 50-289SP

PLACE: Harrisburg, Pennsylvania

DATE: November 19, 1984

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

(Sigt)

(TYPED)

Garrett J. Walsh, Jr.
GARRETT J. WALSH, JR.

Official Reporter

Reporter's Affiliation: ACE Federal
Reporters.

Myrtle H. Traylor

MYRTLE H. TRAYLOR
Official Reporter

Mary C. Simons

MARY C. SIMONS
Official Reporter