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**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

In the matter of:

CONSUMERS POWER COMPANY

(Midland Plant, Units 1 and 2)

Docket No. 50-329 OM
50-329 OL
50-330 OM
50-330 OL

Location: Midland, Michigan

Pages: 20505 - 20617

Date: Tuesday, September 20, 1983

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
ATOMIC SAFETY AND LICENSING BOARD

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In the Matter of: : Docket Nos. 50-329 OM
: 50-330 OM
CONSUMERS POWER COMPANY :
: Docket Nos. 50-329 OL
(Midland Plant, Units 1 and 2) : 50-330 OL
:

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Tuesday, September 20, 1983

Quality Inn Central
1815 South Saginaw Road
Midland, Michigan 48640

The evidentiary hearing in the above-entitled
matter was resumed, pursuant to recess, at 1:11 p.m.

BEFORE:

CHARLES BECHHOEFER, ESQ., Chairman
Administrative Judge
Atomic Safety and Licensing Board

DR. FREDERICK P. COWAN
Administrative Judge
Atomic Safety and Licensing Board

DR. JERRY HARBOUR
Administrative Judge
Atomic Safety and Licensing Board

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1 APPEARANCES:

2 On behalf of Applicant, Consumers Power Company:

3 JAMES BRUNNER, Esq.

4 MICHAEL MILLER, Esq.

5 FREDERICK WILLIAMS, Esq.

6 ROBERTA LAUER, Esq.

7 Isham, Lincoln & Beale
8 One First National Bank
9 Chicago, Illinois

10 On behalf of the Nuclear Regulatory Commission

11 NATHINE WRIGHT, Esq.

12 DONALD HASSELL, Esq.

13 Office of the Executive Legal Director

14 1717 H Street, N.W., Washington, D. C.

15 STEPHEN LEWIS, Esq., Region III.

16 On Behalf of Barbara Stamiris:

17 BARBARA STAMIRIS, 5795 N.River, Freeland, Mich. 48623

18 On behalf of Mapleton Intervenors:

19 WENDALL MARSHALL, RFD 10, Midland, Michigan

20 STEVE J. GADLER, 2120 Carter Avenue, St. Paul, Minn.

21 Appearing Pro Se:

22 MARY SINCLAIR, 5711 Summerset Street, Midland, Mich.

23 Also present:
24
25

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C O N T E N T S

<u>WITNESSES:</u>	<u>DIRECT</u>	<u>CROSS</u>	<u>BOARD</u>
J. Harrison (recalled)	20513	20516	
Joseph Kane (recalled)	20534	20538	20588

<u>LIMITED APPEARANCE:</u>	<u>PAGE:</u>
Colonel Steve Gadler	20614

<u>EXHIBITS:</u>	<u>IDENTIFIED:</u>	<u>RECEIVED</u>
Staff No. 23 (Diesel Generator Building Dewatering Settlement Report, 3/4/83)	20587	20587

P R O C E E D I N G S

1
2 JUDGE BECHHOEFER: Good afternoon, ladies and
3 gentlemen.

4 Before we begin the evidentiary session, are there
5 any preliminary matters that any party wishes to raise?

6 MR. HASSELL: I believe there is one matter that
7 the Staff would like to raise, providing this Board with an
8 explanation as to why an explanation as to why it cannot go
9 forward with evidentiary presentation on the question of
10 whether Consumers Power had violated the Board's April 30th,
11 1982 order.

12 I have been perceiving that as a preliminary
13 matter.

14 JUDGE BECHHOEFER: We have not been.

15 MR. HASSELL: Okay.

16 In that event, the Staff has nothing.

17 JUDGE BECHHOEFER: One thing I would suggest is --
18 that the Staff has a couple of new attorneys on the case --
19 why don't they identify themselves -- for anyone who does not
20 know you.

21 MR. HASSELL: My name is Donald F. Hassell. I am
22 appearing on behalf of the NRC Staff.

23 MS. WRIGHT: My name is Nathene Wright, and I am
24 also appearing on behalf of the NRC Staff.

25 JUDGE BECHHOEFER: You have been here before?

1 MS. WRIGHT: Yes.

2 MR. LEWIS: I am Regional Counsel for Region III
3 and am appearing on behalf of the Staff.

4 MS. STAMIRIS: I have one question as a preliminary
5 matter. That is about scheduling.

6 Are there any dates set aside -- I apologize, I
7 have missed something -- are there any dates set aside in
8 October at this point for hearings?

9 JUDGE BECHHOEFER: We had the first week in
10 October scheduled, but it does not sound like we are going
11 to have anything to consider that week.

12 From what I understand from our conference call
13 last week, the latest one last week -- as I say, the first
14 week in October was scheduled, but there does not seem to be
15 anything that I know of now to hear during that week. We
16 will consider that as soon as we hear the Staff's presentation.

17 Mr. Marshall.

18 MR. MARSHALL: Mr. Chairman, I would like to state
19 for the record Mr. Gadler has come in from St. Paul. He is
20 only going to be here today. It is imperative that he leave
21 sometime this evening.

22 I would like to ask permission that sometime today
23 he be granted permission on behalf of Mapleton Intervenors to
24 give a limited statement, at whatever time it can be brought
25 in today.

1 (Board conferring.)

2 JUDGE LECHHOEFER: I guess toward the close of
3 the session Mr. Gadler could make a statement.

4 Do you wish to have Colonel Gadler participate
5 with any of the other matters, particularly --

6 MR. MARSHALL: Yes, today. But I will be here the
7 rest of the week. He will do it today for me.

8 JUDGE BECHHOEFER: There may be some problem
9 with that. He may wish to ask questions on the dewatering
10 matter, the other things. There may be some problems on
11 dewatering. It will depend on whether he is familiar with
12 the affidavit which Dr. Peck submitted some time ago.

13 I think Colonel Gadler was on the mailing list for
14 that, if I am correct. That is one of the matters we will be
15 considering.

16 You may have some expertise there.

17 MR. GADLER: You are talking about me. Why don't
18 you ask me.

19 JUDGE BECHHOEFER: Are you familiar with that
20 affidavit, the one we are going to be talking about today?

21 MR. GADLER: I have looked it over. I did not
22 memorize it; I've gone over it.

23 JUDGE BECHHOEFER: We will see, when we get there,
24 whether you have any questions. The Staff is going to have a
25 witness.

1 MR. GADLER: Do I understand I can represent
2 Mr. Marshall today?

3 JUDGE BECHHOEFER: Perhaps on some matters, not on
4 everything. You can be a technical --

5 MR. GADLER: I have been working with him. I have
6 been the technical director all of these years. I don't know
7 why you restrain me now.

8 JUDGE BECHHOEFER: Because the NRC rules only
9 present representation by a lawyer except on certain technical
10 matters.

11 MR. GADLER: NRC wants to ensure that the license
12 will issue, regardless of anything -- regardless of all of the
13 safety implications.

14 JUDGE BECHHOEFER: Be that as it may, that is the
15 way the NRC rules work, and we work under the rules.

16 A party may only be represented by a lawyer.
17 Mr. Marshall is the party. He can represent
18 himself.

19 MR. GADLER: Mr. Marshall can sit here, and I can
20 sit next to him and hand him the questions, and he can ask
21 them?

22 JUDGE BECHHOEFER: That's correct.

23 MR. GADLER: It's a crock.

24 JUDGE BECHHOEFER: You may be able to ask questions
25 on the dewatering matter, which is perhaps in your expertise,

1 MR. MILLER: I would note for the record that it
2 is somewhat irregular and out of keeping with my understanding
3 of the NRC rules to have someone make even a limited
4 appearance statement and appear in a representative capacity.
5 But we have no objection to Mr. Gadler --

6 JUDGE BECHHOEFER: I believe Colonel Gadler wanted
7 to make the statement on behalf of Mapleton Intervenors, and
8 they are not a party.

9 I guess toward the end of the -- close of the
10 session we will let him make a statement.

11 The technical interrogation I was referring to
12 would just be based on what I understood was Colonel Gadler's
13 expertise or training. And that was on the dewatering matter
14 only.

15 Are there any further preliminary matters before
16 the Staff presents Mr. Harrison, I believe, with respect to
17 the investigative report?

18 (No response.)

19 MR. HASSELL: Staff will call Mr. Harrison.

20 I believe, Judge Bechhoefer, Mr. Harrison has
21 testified before.

22 JUDGE BECHHOEFER: Yes.
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1 Whereupon,

2 J. HARRISON

3 was recalled as a witness on behalf of the Nuclear regulatory
4 Commission and, having been previously duly sworn, was
5 examined and testified further as follows:

6 DIRECT EXAMINATION

7 BY MR. HASSELL:

8 Q Please state you name and occupation.

9 A John J. Harrison. I am the Section Chief of the
10 Midland Section Office of Special Cases in Region III.

11 Q Would you please provide a brief explanation for
12 the purpose of your testimony today.

13 A The purpose of my testimony today is to give
14 reasons whv the NRC Staff is not prepared to go forward at
15 this time with presenting its case, in violation of the Board
16 order.

17 Q Would you please provide us those reasons.

18 A The reasons are that the Staff only received the
19 report last Wednesday. September the 14th, late in the
20 morning. The Staff has not had time to review and evaluate
21 the report and decide on any actions to be taken should any
22 be necessary.

23 In addition, the Staff witnesses have not had time
24 to review and evaluate the report prior to provideing any
25 testimony. We do not believe that we can go forward at this

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time without having adequate time to prepare and review.

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1 Q The only other question I have would be: are you
2 aware of whether the Staff at this time would be prepared to
3 provide conclusions and/or opinions on the findings contained
4 in those reports?

5 A The Staff is not prepared at this time.

6 MR. HASSELL: I have no further questions on direct.

7 JUDGE BECHHOEFER: Do you have any time estimates
8 about how long it is going to take the Staff to finish its
9 review?

10 THE WITNESS: I would say a fair target is we will
11 try to have the evaluation done, the review and evaluation
12 done within 30 days.

13 JUDGE BECHHOEFER: From now or last week?

14 THE WITNESS: From the time we received the report
15 last Wednesday.

16 JUDGE BECHHOEFER: Could we, if we were trying to
17 set a schedule, could we count on the week of October 17th
18 as a week?

19 THE WITNESS: October 17th?

20 JUDGE BECHHOEFER: I believe that is a Monday. Or
21 is that cutting it too close?

22 MR. MILLER: Judge Bechhoefer --

23 JUDGE BECHHOEFER: I have not inquired if that is
24 convenient for everybody, but I am setting it for the earliest
25 possible date based on what 30 days will be.

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1 THE WITNESS: I would think that would be a reason-
2 able time for the Staff to reach a conclusion. I am not sure
3 if any further actions would be necessary if we would have
4 completed those actions by that time, such as some type of
5 an enforcement action should any be necessary.

6 JUDGE BECHHOEFER: Would the Staff view hearings
7 held by us as any constraint on its bringing an enforcement
8 action or taking separate steps to initiate enforcement?

9 THE WITNESS: We would not consider it a constraint,
10 no, but if the enforcement action, should any be necessary,
11 were not concluded by October 17th, we would not be able to
12 address those actions at that particular hearing.

13 JUDGE BECHHOEFER: For instance, if you decided to
14 seek a civil penalty of some sort, would you expect us to not
15 go to hearing until after the conclusion of any civil penalty
16 proceeding, which could take, as you must know, some time?

17 THE WITNESS: I think the hearing could proceed
18 whether the decision had been reached on the civil penalty
19 issue should one be required. I don't think that would delay
20 the hearing process.

21 JUDGE BECHHOEFER: Are there any comments or questions
22 by other parties?

23 MR. MILLER: I would like to inquire of Mr. Harrison.

24 CROSS EXAMINATION

25 BY MR. MILLER:

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1 Q Do you anticipate any further documentation of the
2 Staff's conclusions other than the investigation report itself?

3 A Certainly if we decided to take any type of
4 enforcement action, it would be documented. If we had no
5 finding. Is that what you are saying?

6 Q Yes, sir.

7 A It will be documented, one way or the other.

8 Q Could you just describe what the approval process
9 is for that documentation? Does that have to go back through
10 OI, for example?

11 A No, the OI report now has been sent to the NRC Staff
12 for its review and action. It would be up to the NRC Staff
13 now, IE Staff, to make that review and make that decision.

14 Q Does your 30-day estimate include time for whatever
15 documentation is appropriate assuming no further action is
16 contemplated?

17 A I think that is a fair statement. yes.

18 MR. MILLER: I have nothing else.

19 BY MS. SINCLAIR:

20 Q In what way is the most recent report different
21 from the first investigative report you received on this
22 matter?

23 A In reviewing the first report, NRC management believed
24 there were too many loose ends, so we asked for the investiga-
25 tion to be reopened and pursue it further. The conclusion of

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1 the second report, I really cannot tell you what it is
2 because I have not concluded my own review.

3 Q Was it done by the same investigator again?

4 A It was done by -- the same investigator was part
5 of the team, but there were additional investigators assigned
6 to it, yes.

7 JUDGE BECHHOEFER: Are those other two persons who
8 participated assigned to Region III at this time or located
9 in Region III? I know there are three names, Mr. Weil as
10 being one of them, and two others.

11 THE WITNESS: They are associated with Region III
12 Office of Investigations.

13 BY MS. STAMIRIS:

14 Q I wondered whether Mr. Harrison, what the report
15 that finally comes out, will it be from OI or Region III?

16 A The report that was recently issued was issued from
17 OI. I believe it was addressed to Mr. Keppler. And the final
18 evaluation of that report would come from the Office of
19 Inspection and Enforcement. Whether it would be Mr. Keppler or
20 Mr. DeYoung would depend on what actions NRC would take.

21 Q Would you consider it joint OI/Region III effort
22 at this point, the second investigation?

23 A I don't think it was a joint effort. It was an
24 OI investigation. We participated in it to the extent that
25 we were part of the investigation, but we did not participate

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1 as investigators.

2 Q I see. Will the final report represent any
3 additions or changes to the second report, or will it be
4 the second report with whatever conclusions you draw?

5 A The first report issued some facts. The second
6 report issued some additional facts as a result of two
7 separate investigations. The additional report we are talking
8 about now would be the IE review stating the conclusion that
9 the NRC -- Inspection and Enforcement Staff has reached based
10 on reviewing both reports.

11 Q I see. So am I correct in understanding that there
12 will be no further investigation taking place between
13 now and the time that we hear about it in this hearing?

14 A Regarding the violation of the Board order?

15 Q Yes.

16 A That investigation has been concluded based on the
17 latest report.

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1 Q When you indicated that you believed Region III
2 would have within 30 days from their receipt of the report on
3 September 14th, that they would have their position ready,
4 whether or not the enforcement actions were finalized; is that
5 correct? Am I understanding you correctly?

6 A Not just Region III. It would be the NRC Staff,
7 Region III being a big part of that. I said enforcement
8 actions if any are necessary.

9 Q Would I be correct in understanding that by
10 October 14th, if it were deemed that enforcement actions were
11 necessary, that that kind of a decision would be made whether
12 or not the exact amounts or the exact type of enforcement has
13 been decided upon?

14 A No, I think we would reach a conclusion by the end
15 of the 30-day period that some type of action would be neces-
16 sary. The type of action to be taken, whether it be an
17 escalated type of action or enforcement action or no action.
18 If there is no action by the end of the 30 days, we will know
19 that, but if there is any kind of an increased or escalated
20 action as far as a civil penalty or any kind of action against
21 Consumers Power, that is something that would take some
22 additional time to weigh. It is not something we can decide
23 at the end of the 30 days.

24 Q Mr. Harrison, are you aware of any dissatisfaction
25 within the NRC Staff with the second investigation as it was

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1 presented to you that contributed to this decision not to
2 come forward with it in hearings at this point in time?

3 A No, I am not aware of any. I do not know of
4 anybody on the Staff that has read the entire report yet.

5 MS. STAMIRIS: I have no further questions.

6 (Counsel conferring)

7 JUDGE BECHHOEFER: Are there further questions on
8 this? What would the parties suggest as to hearing times?
9 Is the 17th a bad week?

10 MR. MILLER: It is a bad week for me personally,
11 Judge Bechhoefer.

12 JUDGE BECHHOEFER: I have no reason to go that week
13 rather than some other week.

14 MR. MILLER: The next week would be satisfactory with
15 me and the Company.

16 MR. STAMIRIS: Excuse me. If I may interject
17 before we go too far in considering this, the question I asked
18 Ms. Bernabei the last time I spoke to her, I said, is there
19 any week that you absolutely cannot come in the October,
20 early November area, and she said the last week of October
21 was out for her. She is involved in some other hearings.

22 MR. HASSELL: The week of the 24th.

23 JUDGE BECHHOEFER: What about the week of October
24 31st through November 4th?

25 MR. HASSELL: That would be acceptable to Staff.

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1 JUDGE BECHHOEFER: Figuring that we go for five
2 days.

3 MR. MILLER: That would be satisfactory.

4 Judge Bechhoefer, I would like to inquire, at least
5 on the record, as to whether or not, given this delay, we
6 might properly close the OM record at the end of this week,
7 assuming there is going to not be any additional contentions
8 admitted with respect to the Dow matter, so that we can set a
9 schedule for proposed findings of fact and conclusions of law
10 on that subject as well and treat the violation of the Board
11 order as an operating license issue.

12 JUDGE BECHHOEFER: Well, the Board had talked over,
13 I think, the suggestion, a similar suggestion that you made
14 earlier, and one of the problems is that the answer whenever
15 we come up on the violation issue could affect the scope of
16 the current order, the order that was violated. In that
17 respect, the Board would prefer hearing that as an OM issue.
18 That does not necessarily mean that we cannot set a schedule
19 for findings and modify them as appropriate. We are not
20 adverse to something like that, particularly since I believed
21 you had asked for 60 days you might need after the close of
22 the OM record to submit your QA findings. If the record were
23 closed subject to the violation issue, you would perhaps have
24 a little more than 60 days.

25 MR. MILLER: I think we are working on the findings

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1 dealing with the other quality assurance and management
2 attitude issues. I would anticipate that within 30 days after
3 the close of the hearings, we would consider the alleged
4 violation of the Board order, that we would be in a position
5 to present the Board and the parties with complete proposed
6 findings of fact and conclusions of law on those matters.

7 JUDGE BECHHOEFER: We would not be adverse to some
8 sort of an arrangement of that sort. I guess we can talk
9 about that toward the close of the session this week. I think
10 later this afternoon we are going to talk about your motion
11 concerning the other proposed findings. Do the parties think
12 that one week will be enough for the violation issue once all
13 of the reports are in and the Staff reaches a conclusion --
14 the alleged violation, I'm sorry.

15 (Counsel conferring)

16 MR. HASSELL: Is that for both the Applicant and the
17 Staff's case that you are asking?

18 JUDGE BECHHOEFER: I suspect it might take a bit more
19 than a week.

20 (Board conferring)

21 JUDGE BECHHOEFER: As a suggestion, we can plan --
22 we don't think it will take two full weeks no matter what
23 happens. If we start on a Monday, went through Saturday, and
24 if we had to, Monday or Tuesday, perhaps we could wind it up
25 in a session like that.

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1 MR. MILLER: I would hope so.

2 MR. HASSELL: I would think that would be plenty
3 of time.

4 JUDGE BECHHOEFER: I will have to inquire about the
5 availability of the space here. Unless we can finish by that
6 Saturday, we probably would not run all day Saturday, but if
7 we could finish Saturday, we might just stick it out. If not,
8 we can come back Monday and Tuesday. I would hope that would
9 be enough time. I will check on the space availability and
10 that kind of thing, and then tentatively we will plan on
11 going from October 31st through at least November 5, which is
12 a Saturday, and November 7, 8 and 9 if we have to, as far
13 into that next week as we need.

14 MR. MILLER: Judge Bechhoefer, may I inquire of the
15 Staff as to who the witnesses will be that will be presented
16 in connection with that issue?

17 MS. WRIGHT: The OI investigator, Charles Weil,
18 W-e-i-l, Ross Landsman, Ron Cook and Darl Hood, Joseph Kane.

19 MR. MILLER: I would like to request that the Staff
20 provide as witnesses the other two investigators who participated
21 in some of the investigative effort that took place.

22 JUDGE BECHHOEFER: I looked at my copies. There are
23 three on this rather than two. I made a mistake on this before.

24 MR. MILLER: I did not keep tally. I knew that there
25 was more than one additional investigator. If there were three,
then I request the three.

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1 JUDGE BECHHOEFER: The people named were Galanti,
2 Kalkman, and Walker.

3 MR. HASSELL: It is my understanding that
4 Charles Weil is the principal investigator. That is, it is
5 the Staff's judgment that he would be adequate for the purpose
6 of covering these matters, at this point would be prepared to
7 speak to the resource question for OI.

8 It is my understanding that Charles Weil would be
9 in the position to adequately provide whatever responses are
10 necessary in terms of any questions.

11 MR. MILLER: Judge Bechhoefer, Mr. Weil was not
12 present and did not participate in the interrogation.

13 One of the witnesses, whose testimony -- or his
14 statement, as reported, seems to me to be quite pertinent to
15 the issues before the Board. Indeed, the central issues
16 before the Board, frankly, the whole set of circumstances
17 surrounding that interview, including the lost pen issue,
18 I think deserves some exploration with individuals who are
19 present at the interview.

20 The NRC Staff is not going to provide those
21 witnesses, and I have no way of compelling them to do so.
22 But I would then move for the issuance of the subpoena for
23 Mr. Donnel, and we will hear his side of what took place.

24 JUDGE BECHHOEFER: He is a crucial witness?

25 MR. MILLER: Yes.

1 MR. LEWIS: Mr. Chairman, perhaps I can just add
2 that the Office of Investigations is separate from the NRC
3 Staff. And the most that we could do is advise them of the
4 request from the party that they make additional investiga-
5 tion available. We have no control over their resource
6 allocation. I would like that understood.

7 JUDGE BECHHOEFER: Did you specify the particular
8 people that were involved in that interview?

9 MR. MILLER: Mr. Galanti and Mr. Walker partici-
10 pated in the interview of Mr. Donnel.

11 (Board conferring.)

12 JUDGE BECHHOEFER: The Board does -- we are not
13 sure of the participation of each of those, but I would think
14 that at least one of those people, if not both, would be
15 desirable.

16 I don't know what the resource question is. I
17 would say at least one of the people who was present at
18 Mr. Donnel's interview --

19 MR. HASSELL: Obviously, the Staff will make
20 every effort to satisfy the Board's desire.

21 At this point, I cannot commit to having the
22 individuals. But I will attempt to find out whether the
23 individuals can be here.

24 JUDGE BECHHOEFER: It may not be necessary to have
25 all of the investigators present for the whole session as

1 long as -- for the cross-examination, in terms of scheduling.

2 MR. MILLER: While we are on that subject,
3 Mr. Brunner conducted a telephone interview of Mr. Donnel
4 and would like to tender notes of his telephone interview to
5 all of the parties and the Board, if it wishes to have it.

6 Mr. Brunner will not take the stand and authenti-
7 cate it or anything like that, but it is additional informa-
8 tion that the Staff might wish to use in their evaluation of
9 the overall investigation report.

10 MR. HASSELL: May I make one basic inquiry? Were
11 these documents provided to OI?

12 Presumably, if they are relevant --

13 MR. MILLER: This is an interview that was
14 conducted subsequently to the Staff interview of Mr. Donnel,
15 done on the telephone. It probably took less than 10 minutes.
16 Mr. Brunner's notes were just transcribed within the last
17 week.

18 It is for that reason that we are turning them
19 over now.

20 MS. STAMIRIS: When did this conversation between
21 Mr. Brenner and and Mr. Donnel take place?

22 MR. MILLER: September 6th of this year.

23 MS. STAMIRIS: I do not know the details of the
24 legality. But it seems to me strange that it is something
25 that is being investigated and has not come to hearing yet.

1 It does not seem to me like one of the parties should be
2 approaching potentially one of the key witnesses in this
3 case and then presenting their version of information
4 received. It seems strange to me, done out of any official
5 setting and understanding of any other parties, unless -- was
6 the NRC aware that you were going to contact Mr. Donnel?

7 MR. MILLER: No. I do not regard this as being
8 any restriction, that I am aware of, from contacting witnesses
9 on our own, as we see fit, with respect to facts that are
10 -- are or may be the subject of evidentiary presentation
11 before this Board.

12 I repeat, I am not offering this anyway as
13 evidence or truthfulness of the matters stated therein. It
14 It is simply an additional bit of information that the
15 Staff may wish to review in evaluating, itself, the investiga-
16 tion report.

17 MS. STAMIRIS: May I ask the Board aren't there
18 any prohibitions against this type of contact during an
19 ongoing investigation?

20 MR. HASSELL: I would say I'm not aware of any
21 prohibition. But in any event, it seems to me if there is
22 this information, it would be provided to OI. I am not
23 inclined to offer -- if you have information that is relevant
24 to the recently completed OI investigation, I would accept
25 it and provide it to OI. That is my duty to do that.

1 That's all I can say about this.

2 JUDGE BECHHOEFER: I don't think there would be
3 any objection to that at all.

4 It would not be put into evidence.

5 MR. MILLER: No; I'm not intending to offer it.

6 MS. STAMIRIS: I wish I had my attorney here. I
7 don't know whether this would be considered an ex parte
8 communication. I certainly do not feel it would have been
9 right for me to contact one of the witnesses during the
10 ongoing investigation by the NRC. I thought there was
11 supposed to be a "hands off" period or a time in which we
12 let the NRC do their business and conduct their investigation
13 as they see fit, without introducing any type of ex parte
14 or other contact with any of the people involved.

15 I am quite sure that my lawyer would wish I would
16 object to this -- any use being made of this information. At
17 least I would like to be able to talk to her about this
18 before anything is done with this or any decisions are
19 made on this.

20 (Board conferring.)

21 JUDGE BECHHOEFER: As I say, the document is not
22 going into evidence. It is just background information.

23 I don't know of any particular rule which
24 prohibits contacting witnesses who are the subject of
25 investigation unless the Staff has made an official

1 statement that they don't want interference of some sort.

2 I would have viewed it as inappropriate for the
3 Applicant, for instance, to ask to start their investigation
4 on the Zack matters, given the agreements we had reached
5 during the hearing.

6 I don't know that there is any rule that would
7 preclude that.

8 I may not be aware of everything I should be
9 aware of. Be that as it may, I think that since the
10 information is available, all the parties should have access
11 to it.

12 MR. MARSHALL: Judge Bechhoefer, would you tell
13 me, please, as you understand it, what the purpose of this
14 submission is.

15 JUDGE BECHHOEFER: Just as background information.

16 Mr. Donnel is involved, to a large extent, in
17 this supplemental investigation.

18 MS. STAMIRIS: I have read the supplemental
19 investigation myself and am aware of the situation with
20 Mr. Donnel to the extent that it was given in this
21 investigation.

22 I would just like to object on the record to any
23 background information being provided to the Board or other
24 parties in a very controlled and limited way in which it
25 would necessarily be as something being transcribed from notes

1 of Mr. Brunner before the NRC had even received the
2 investigation report on September 14th.

3 At this point, not being sure of what other legal
4 arguments I can raise as to that, I would like to object to
5 any sharing of this as background information, at least until
6 such time as I have a chance to talk to my lawyer about this.

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1 JUDGE BECHHOEFER: I might add that this is
2 normally the kind of thing that the Applicant would claim
3 work product privilege if it were sought.

4 MR. MILLER: It was a desire to share whatever
5 information we have with the parties, particularly the Staff.
6 I would not rely on privilege. We thought in light of -- and
7 in fact, the significance of Mr. Donnel's statements was not
8 apparent to us until we saw the investigation report, and at
9 that point in time we thought there were good reasons to make
10 available whatever information we had. Whatever qualifications
11 people want to put on it when they accept it and use it, that
12 is okay, but it is what we have got and we want to share it.

13 MS. STAMIRIS: My objection is based on the fact
14 that this is a controlled piece of information in which it is
15 possible that Mr. Brunner told us what we wanted to tell us
16 or took notes on what he perceived as important, things like
17 this, during the conversation with Mr. Donnel. For those
18 reasons -- if this had been transcribed by a court reporter or
19 if there was some kind of recording in which we could all hear
20 for ourselves exactly what was said in the conversation and
21 evaluate the manner of the presentation and things like this,
22 perhaps that would be different; but my objection is based on
23 the manner in which it was done and is being presented at this
24 time, the control over this information.

25 MR. HASSELL: I might add, if I may, Judge Bechhoe-
fer.

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1 JUDGE BECHHOEFER: Yes.

2 MR. HASSELL: At this point in time I cannot see
3 any prejudice that would flow from disclosure of the document,
4 although I appreciate what you are saying. It is not being
5 admitted in evidence. I assume at such time that it may be,
6 you would have cross-examination rights that attach to that.
7 I just don't see any prejudice that would flow, saying here
8 is a bit of information that may prove relevant, matters that
9 we may have to look into later.

10 I do not have anything further than that.

11 JUDGE BECHHOEFER: I think the Board agrees with that.
12 It cannot be introduced into evidence without somebody like
13 Mr. Brunner sponsoring it. I don't think it will be. We will
14 have to hear more about Mr. Donnel during our hearings on the
15 violation. Whether or not Mr. Donnel will be here or not, I
16 cannot say. I think if a subpoena were sought, we would grant
17 it pretty rapidly.

18 MR. MARSHALL: Couldn't this gentleman be presented
19 for examination, cross-examination, direct examination on the
20 subject matter?

21 JUDGE BECHHOEFER: That is what I just said. If a
22 subpoena were sought -- he is no longer an employee of either
23 Consumers or Bechtel.

24 MR. MILLER: Correct.

25 MR. BRUNNER: Right.

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1 JUDGE BECHHOEFER: We would have to issue a subpoena
2 to have him come. Certainly if the Applicant seeks such a
3 subpoena, we will grant it.

4 MR. HASSELL: May we have Mr. Harrison dismissed?

5 JUDGE BECHHOEFER: Any further questions of Mr.
6 Harrison while he is still here on this subject?

7 MR. MILLER: No.

8 JUDGE BECHHOEFER: Mr. Harrison, for the time being
9 you are excused.

10 (The witness was excused.)

11 JUDGE BECHHOEFER: We will see you again later in
12 the week.

13 MR. HASSELL: Are you prepared for the Staff to go
14 foward?

15 JUDGE BECHHOEFER: Yes.

16 MS. WRIGHT: The Staff calls Joseph Kane to the
17 stand.

18 Whereupon,

19 JOSEPH KANE,
20 a witness previously on the stand, was recalled as a witness
21 by counsel for the Nuclear Regulatory Commission Staff and,
22 having been previously duly sworn under oath, was examined
23 and testified further as follows:

24 DIRECT EXAMINATION

25 BY MS. WRIGHT:

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1 Q Would you state your name and occupation?

2 A My name is Joseph Kane. I am a geotechnical engineer
3 for the NRC Staff.

4 Q Would you state the purpose of your testimony?

5 A The purpose of my testifying is to provide the NRC
6 Staff's comments on a March 4, 1983 report entitled, "Diesel
7 Generator Building Dewatering Settlement Report" and
8 an accompanying March 4, 1983 affidavit by Dr. Peck.

9 Q Based on your review of those documents, would you
10 please state what you believe to be the personal conclusions
11 set forth in the Diesel Generator Building Dewatering Settlement
12 Report and the affidavit of Dr. Peck accompanying the report?

13 A Yes. I think it was back in December when we were
14 looking at plots of settlement versus long-time for several
15 diesel generator building settlement markers. It was indicated
16 that there was a steepening of the settlement flow path after
17 approximately 1000 days after the start of surcharging. The
18 1000 days corresponds approximately to October 1981.

19 The significance of the steepening slope is that
20 if that slope had continued, it would have resulted in larger
21 settlement failures being obtained, larger than what had been
22 predicted using the straight line secondary consolidation
23 curve.

24 In response to a question that was posed to Dr. Peck
25 at the hearing, the March 4, 1983 report was provided. The

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1 principal conclusions as I understand them in the March 4,
2 1983 report are: one, the steepened slopes of the settlement
3 blocks are primarily due to settlements in the natural
4 soils resulting from dewatering operations at the plant site.
5 It could be noted that in the diesel generator building area,
6 the groundwater was lowered from approximately elevation 621 to
7 elevation 590 in the time period of April 1981 until February
8 1982. February 1982 was the start of the recharge tests where
9 the groundwater was allowed to raise again.

10 The second conclusion in the Applicant's report is
11 that future settlements due to dewatering should be small
12 since future drawdowns will not exceed levels that have already
13 been obtained. And the third and final conclusion is that the
14 slopes of the settlement plots that have been used to predict
15 future settlements for the diesel generator building are
16 conservative. These were the plots that were based on the
17 assumption that the surcharge loading is still in place, and
18 there was a linear extrapolation of the secondary consolidation
19 curve to predict future settlements.

20 Q What is the Staff's evaluation of those conclusions?

21 A We have evaluated both the affidavit and the March
22 4th report, and based on that evaluation are in agreement with
23 the three conclusions, that are: the steepened slopes are
24 primarily due to the settlements in the natural soils resulting
25 from the dewatering operations; future settlements due to

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1 dewatering should be small; and the settlement plots that
2 have been used to predict future settlements are conservative.

3 When I indicate our agreement with these conclusions,
4 it should be recognized that the problem that the Staff has
5 indicated in past hearing sessions with respect to the use of
6 the settlement values in the structural analysis has not been
7 addressed in the March 4th report, nor have I responded to
8 that problem which has been identified in the past.

9 There are a few other things I would like to add.
10 Although we recognize the limitations in predicting future
11 settlement, which is what we are trying to do now, the Staff
12 does develop confidence and assurance in what is being done
13 by recognizing that we will have technical specifications in
14 place while the plant is in operation. Those technical
15 specifications will be addressing the future settlements and
16 comparing them to what has been predicted. In this manner,
17 both the Applicant and the Staff will be able to check and
18 verify the trend and the magnitude of those settlements to show
19 that future settlement predictions are not being exceeded.

20 That is all the comments I have.

21 MS. WRIGHT: Staff tenders its witness for
22 cross-examination.

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1 JUDGE BECHHOEFER: Ms. Stamiris.

2 MS. STAMIRIS: I have none.

3 MR. GADLER: I would like to ask some questions.

4 JUDGE BECHHOEFER: Ms. Stamiris usually goes
5 first.

6 MS. STAMIRIS: It doesn't matter to me.

7 JUDGE BECHHOEFER: On this subject alone we will
8 allow Colonel Gadler to ask some questions if he wishes.

9 You can go ahead.

10 MR. GADLER: Pardon?

11 JUDGE BECHHOEFER: You can go ahead now.

12 CROSS EXAMINATION

13 BY MR. GADLER:

14 Q I have one question. How can you make a scientific
15 conclusion on an assumption?

16 A Would you be specific with respect to what assumption
17 you are referring to?

18 Q Pardon?

19 A Would you be specific with respect to what assump-
20 tion you are referring to?

21 Q You made an assumption. You made a statement using
22 an assumption.

23 A I'm trying to understand what conclusion you are
24 referring to.

25 Q You answered the attorney's question over here and

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1 you said you assumed something based on an assumption. How
2 can you make a scientific conclusion?

3 A I would agree with you that it would be difficult
4 to make a conclusion based on an assumption, but the data that
5 has been provided, measurements of settlement over long
6 periods of time, are not assumptions. They are in fact facts
7 which we have evaluated.

8 Q In this report on the first page summary, you say
9 use of secondary compression slopes, the settlement prediction
10 assumes that the surcharge remains. How can an assumption be
11 used in a safety-related matter?

12 A First of all, I think there is confusion. I think
13 the report you are referring to was written by the Applicant,
14 not myself.

15 Q Okay.

16 A But I would like to answer your question. The
17 assumption which is being referred to is that when the
18 surcharge was in place, we got primary consolidation and went
19 into secondary consolidation. The line that trends at that
20 time is being used to predict future settlement. The statement
21 that says the assumption of the surcharge in place means we
22 recognize now that that surcharge was taken off. We recognize
23 now the assumption that assumes that it is in place is con-
24 servative. So that assumption is an additional conservatism
25 from what we usually use to predict the future settlement.

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1 Q So all of the assumptions used throughout this,
2 would the same answer apply?

3 A To be able to answer you, I would have to know what
4 assumptions you are referring to.

5 Q But you did not prepare this book?

6 A No, but I evaluated it.

7 Q Page 4, paragraph 3. You have, "The C alphas selected
8 on the assumption that the surcharge will remain in place for
9 40 years are conservative."

10 MS. WRIGHT: Excuse me. Could Colonel Gadler
11 explain where he is reading again? Is he in the report or
12 the letter?

13 MR. GADLER: Page 4 of the report. Diesel generator
14 building dewatering --

15 MS. WRIGHT: Not the cover. There is a letter and
16 a report following.

17 MR. GADLER: Page 4. Paragraph 3 of page 4.

18 MR. MILLER: It is the letter.

19 MR. HASSELL: There are not four pages to the
20 letter.

21 MS. WRIGHT: The third full paragraph.

22 MR. GADLER: Yes, third paragraph, the last two
23 lines.

24 MS. WRIGHT: I see it now.

25 THE WITNESS: It says on page 4, "Thus the C alphas

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1 selected on the assumption that surcharge will remain in place
2 for 40 years are conservative." Is that what your question
3 is?

4 BY MR. GADLER:

5 Q Yes.

6 A What has been indicated is this secondary consolidation
7 prediction for future settlement is based on a line that was
8 developed when the surcharge was in place. In other words, the
9 load is greater than future loads. The surcharge was in
10 place. So I think it would be recognized by geotechnical
11 engineers that if you are predicting secondary consolidation
12 with a greater load than what you will have in the future,
13 that is a degree of conservatism.

14 Q You base this on 40 years, but what if the watering
15 system fails?

16 MS. WRIGHT: Your Honor, I object to Colonel Gadler's
17 characterization that this is Mr. Kane's assumption. This is
18 a Bechtel report.

19 MR. GADLER: Is this a Bechtel report?

20 MS. WRIGHT: Yes.

21 MR. GADLER: May I ask him questions about it?

22 MS. WRIGHT: Yes; but your characterization of it
23 was that he assumed these things. You read from the report --

24 JUDGE BECHHOEFER: Mr. Kane reviewed the report. It
25 was prepared by Bechtel and sponsored by the Applicant.

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1 MS. WRIGHT: If Colonel Gadler rephrases the ques-
2 tion, I will withdraw my objection.

3 MR. GADLER: How would you phrase the question?

4 MS. WRIGHT: It is not my question.

5 BY MS. STAMIRIS:

6 Q Mr. Kane, remembering that you stated that you
7 basically agreed with the conclusions in Dr. Peck's March 4,
8 1983 dewatering report, can you tell me whether -- can you
9 tell me in rough terms how close was the dewatering going on
10 to -- how close to the diesel generator building was the
11 dewatering operation taking place which caused the settlement
12 there?

13 A The dewatering operations that have taken place at
14 the plant have been conducted in stages. There was dewatering
15 that preceded the dewatering of the diesel generator building
16 in the area of the reactor building containments and the
17 auxiliary building; but with respect to the diesel generator
18 building, the groundwater table was actually being lowered in
19 the area directly beneath the diesel generator building at
20 this time.

21 Q In other words, was the groundwater table change
22 at the diesel generator building due to the dewatering opera-
23 tions taking place near the containment and the auxiliary
24 building?

25 A I think if my recollection is correct, the dewatering

1 in the reactor building started August 1980. The significant
2 dewatering at the diesel generator building took place, I
3 think it was after 785 days, which I think corresponds to
4 like April of 1981. It was at that time the groundwater table
5 was gradually lowered from approximately elevation 621 to
6 approximately 592 in the diesel generator building.

7 Q The time frames between the drop in settlement that
8 you saw in the markers at the diesel generator building did
9 correspond to the time frame during which the significant
10 dewatering begin in April 1981 at the diesel generator
11 building.

12 A When the dewatering started in the diesel generator
13 building in April of 1981, there was a period where it was
14 drawn down at a slower rate than it was at a later phase, and
15 the settlement at that time was not as great as it was after
16 1000 days. I think 1000 days is approximately October of 1980.
17 That is the period of the sharpest increase in settlement.

18 Q So the pumping was actually increased. The rate of
19 pumping was increased around October of 1981 from what it was,
20 let's say, in April of 1981?

21 A I don't know if that is correct or not. I know
22 measures were being taken in recognition of the desire to
23 run this charge to get the elevation down to 590, which is the
24 level it would be held to in plant operation, and once it was
25 obtained, the system would be shut off. So I think in this
time frame, additional wells are being installed to lower the

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1 groundwater table.

2 Q What was the date you gave -- I think you did give
3 it before -- as to when the recharge began at the diesel
4 generator building?

5 A Actually, the recharge test was more than just the
6 diesel generator building. It began February 1982.

7 Q Were these settlements which Dr. Peck has explained
8 in this report, with which you have agreed, were these
9 settlements in the glacial till or natural soil expected?

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1 A The settlements due to dewatering were expected.

2 Q Were they expected to the degree to which they
3 occurred?

4 A Yes, in my estimation.

5 Q Why weren't they taken into account earlier? Why
6 was it not until after the fact, when a certain discrepancy
7 appeared in the drop in this one reading at the diesel
8 generator building that Dr. Peck came up with this hypothesis
9 and set about to indicate what had caused it?

10 A To answer you, I have to indicate that if you go
11 back in the record with the discussions with regard to the
12 diesel generator building, there were statements that had been
13 made by Applicant that stated the surcharge was being sized
14 large enough to reduce stresses at all levels in the
15 foundation to take account of the dewatering.

16 I was under the impression that the Applicant was
17 indicating the surcharge would include the effect of drawdown
18 in the natural -- I don't want to say "till" -- it is
19 actually a lacustrine -- l-a-c-u-s-t-r-i-n-e, lacustrine --
20 clay.

21 When I looked at the surcharge program, I was
22 under the impression that they sized the surcharge large
23 enough to cover the dewatering, not only in the fill but in
24 the natural soil.

25 When I reviewed this report, it was brought to my

1 attention that the Applicant was not stating that. And I
2 felt, when I read this, it was something that I had to
3 resolve with them. I did that by a conversation I had with
4 the geotechnical people. It was not their intent to say the
5 surcharge was large enough to cause the settlements due to
6 the dewatering in the natural soils. They were addressing
7 only the plant fill.

8 There is some problem when it is recognized that
9 the settlement that is being measured, the markers are
10 measuring both the settlement and the fill and the till. And
11 how you would be separating that settlement while it is
12 occurring between the till and fill, it is unclear to me how
13 they intended that in the past.

14 I guess the bottom line for me is it does not
15 matter whether the settlement is in the fill or the till. It
16 is the settlement, wherever it occurs, that is potentially
17 introducing differences in settlement that is the problem
18 when you are looking at its effect on the diesel generator
19 building.

20 Q Would I be correct, then, in understanding that
21 you have, then, made no further attempts to determine whether
22 any differential settlement has been caused at the diesel
23 generator building exclusively due to settlement of the
24 natural soils?

25 A The attempt that we are making is to look at the

1 settlements that are occurring and to make a judgment whether
2 these settlements are greater than what we have allowed for --
3 by our prediction of future settlements. So, we are making
4 that judgment.

5 Q But to answer my question precisely, you are not
6 making an attempt to look exclusively at the till?

7 A That is correct.

8 Q I would like to make some brief references to
9 questions that were raised by Judge Harbour on December 7th.

10 In your testimony, when this subject was first
11 approached, since it is something that I do not understand
12 precisely -- I just want to make sure it is covered -- I
13 would like to either read the question and have you respond
14 to it now, unless Dr. Harbour intends to go into this at some
15 later time.

16 Without saying any more, I will read the question
17 posed by Judge Harbour. This is on page 10572.

18 Judge Harbour to Witness Kane: "Mr. Miller gave
19 you some assumptions as to the way to go. But if the rate
20 of settlements per log unit of time that is shown as the
21 total on that is for assumptions twice the settlement per log
22 unit of time, that is attributable to secondary consolidation.
23 Does that mean that the settlement is roughly half attributable
24 to each dewatering and secondary consolidation; or is that
25 too long of a question?"

1 (Laughter.)

2 MS. WRIGHT: Could the witness be provided with a
3 copy of the question, since it is --

4 MS. STAMIRIS: I will give this to Mr. Kane. But
5 I would just like to say I understand this is taking it
6 somewhat out of the blue. And if you cannot recollect, I
7 just wondered -- wondered if this would refresh his memory
8 as to what was raised, considering secondary consolidation as
9 opposed to dewatering.

10 (Handing document to counsel.)

11 (Pause.)

12 MS. STAMIRIS: If Judge Harbour remembers.

13 JUDGE HARBOUR: Ms. Stamiris, it is perfectly all
14 right with me for you to do this now.

15 Or again, what I would like to know is, in that
16 exchange, had Mr. Kane previously answered the question? And
17 if so, why are you asking it again? Or are you asking if he
18 has changed his mind on the subject?

19 It is not clear to me what your present question
20 is -- that is, based on my previous question to Mr. Kane.

21 MS. STAMIRIS: My present question would be, if
22 Mr. Kane remembers that exchange, whether there was any new
23 information that came to him or any change in his opinion on
24 this question that you raised once he had a chance to study
25 the report done by Dr. Peck.

1 MR. MILLER: I would just like to point out that
2 the two pages really refer to testimony which, as I am looking
3 at our copy of the transcript, extends over some pages before
4 that. Part of it was my examination, and then Judge Harbour
5 took it up.

6 Perhaps, in fairness to the witness, he could
7 review more of the transcript than just those two pages.

8 JUDGE BECHHOEFER: Do you remember that exchange?

9 THE WITNESS: I do not. And I think I would have
10 to review the exchange before this as well as after this.

11 MS. STAMIRIS: I will go on to other questions
12 then.

13 JUDGE BECHHOEFER: Is that copy of the transcript
14 around?

15 MR. MILLER: Yes, sir.

16 JUDGE BECHHOEFER: Maybe, when we take a break,
17 Mr. Kane can look at it.

18 BY MS. STAMIRIS:

19 Q Mr., Kane, in your testimony today, I believe you
20 mentioned that there was some -- and I do not know if I have
21 this correctly -- problem with settlement slopes that had
22 been identified in the past which was not addressed in the
23 March 4th report.

24 I would like you to correct if I have any
25 misunderstandings of what I said and explain what it was you

1 you were referring to.

2 A Summer 1982 session were, to me personally,
3 bloody.

4 (Laughter.)

5 I do remember them fairly well.

6 The problem I was referring to was it is the
7 position of the geotechnical engineer reviewers that the
8 measured settlement values and predicted settlement values
9 were not appropriately used in the Applicant's structural
10 analysis. And that is the problem I am referring to.

11 Q Then, by making the statement that you did today
12 that you did not address that previous problem which was gone
13 into at quite great length, would I be correct in understand-
14 ing that there has been no change in position of the
15 geotechnical branch -- that previous problem regarding the
16 measured settlement values and the predicted settlement
17 values?

18 MR. MILLER: I'm going to object. I think this
19 is far beyond the scope of Mr. Kane's direct testimony and
20 the purpose for which his testimony is being offered here
21 today.

22 We went through much of this, as Ms. Stamiris
23 points out, in December.

24 There is an ongoing investigation by Brookhaven
25 to further analyze the structural capability of a diesel

1 generator building. I think it is a digression from what I
2 understand the purpose of Mr. Kane's testimony to be, and I
3 object.
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(Board conferring)

JUDGE BECHHOEFER: I think we would sustain that objection. Judge Harbour has an alternative question which may cover some of the things you are driving at.

JUDGE HARBOUR: Mr. Kane, is there anything inconsistent between the use of the individual data measurements in Dr. Peck's report and the previous use of the individual data points from which were derived the structural analysis of the diesel generator building?

THE WITNESS: I am going to repeat the question as I understand it? Is there anything in Dr. Peck's report with respect to the settlements that is different than what is used or the settlements that were addressed in the structural report? Is that the question?

JUDGE HARBOUR: What I am really getting at is is it inconsistent to use the individual data points in one place and then use smooth data in another place?

THE WITNESS: I would think in engineering there would be occasion where you would use individual and then use them as a group along with other data. I think depending on what you are attempting to do with the data would be the basis for making that decision.

When we talk about an individual point like marker DG-3, what we are trying to understand is what is actually settled and what was predicted for settlement in the future. I think it is proper to look at an individual point in this

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1 regard. When you are concerned with what differential settle-
2 ment has done to the diesel generator building, then you should
3 be looking at the difference in elevations between the individual
4 points and how they are being used. I think you should then
5 group that data for an evaluation.

6 MS. STAMIRIS: I have some other questions that I
7 would like to address of Mr. Kane. I would like to preface
8 them by saying that the information, the testimony that he has
9 given regarding the -- what in this report are called signi-
10 ficant -- I believe they are called significant drawdown
11 effects on the natural soils and the glacial till that are
12 sited in this report, and also on the basis of one other
13 document that I received subsequent to the Board's order on
14 my containment cracks, the containment cracks issue, I would
15 like to be able to ask a few more questions of Mr. Kane at
16 this time on what I consider to be that related issue, with
17 the thought in mind of helping me determine whether or not
18 the containment crack issue needs to be reopened or raised in
19 some new way, and if you would like me to describe briefly
20 the other document that I have, I could do so too.

21 MR. MILLER: Judge Bechhoefer, this is a matter that
22 has been raised in motion, addressed by Applicant and the
23 Staff, decided by the Board. If Mrs. Stamiris believes that
24 she has something new and wants to check it with Mr. Kane,
25 perhaps he will talk to her off the record, but I see no

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1 and these are very brief issues, it would help me resolve in
2 my own mind whether the containment crack issue needs to be
3 reopened, whether that could be done today while he is still
4 here so that if there needed to be some questions, they could
5 take place on the record today.

6 (Board conferring)

7 JUDGE BECHHOEFER: Do you have other questions other
8 than this? During the break we could explore that.

9 Mr. Miller?

10 MR. MILLER: I have no questions.

11 JUDGE BECHHOEFER: I think we have plenty of time
12 this afternoon. This could be explored on a break.

13 MR. GADNER: Your Honor, it seems to me that what
14 Mrs. Stamiris has brought up has safety-related implications.
15 I do not understand why it would not be explored by your Board.

16 JUDGE BECHHOEFER: We have explored this matter to
17 some extent in the past. We issued a fairly extensive ruling
18 on this. Do you have other questions other than those?

19 MS. STAMIRIS: No, I don't have any other questions
20 for Mr. Kane other than that.

21 (Board conferring)

22 JUDGE BECHHOEFER: One more thing before we go on
23 break, or maybe during the break. Has anybody tested out the
24 Speakerphone system to see whether it will work here?

25 MS. WRIGHT: The Speakerphone will not work on the

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1 reason for burdening the record with this exchange given the
2 Board's prior ruling.

3 (Board conferring)

4 JUDGE BECHHOEFER: I think what Mr. Miller suggested
5 would be a better way of proceeding. It is clearly beyond
6 even the subject matter that Mr. Kane is here to testify on
7 today. I think you could talk to him off the record and
8 see whether whatever the information is that you have would
9 tend to contradict the order that we issued, that we analyzed
10 a good bit of the technical information in the record on at
11 that point.

12 MS. SINCLAIR: I think the Board should explore
13 the interrelationships with what is happening at that plant
14 site. If you have data that seems to contradict, data in
15 regard to the crack in the containment building that seems
16 to contradict the data we are getting now in relation to the
17 diesel generator building, then I believe you should ask for
18 an explanation.

19 JUDGE BECHHOEFER: We are suggesting that it be
20 explored with Mr. Kane to determine first whether it is worth
21 even bringing to our attention. It may not be.

22 MS. STAMIPIS: I wonder if this exploration, which
23 I know Mr. Kane already has one thing to do on the record --
24 I wonder if we could discuss this on a break so that if indeed
25 he agreed or it appeared that there was some significant
relationship between the issues that I wish to raise with him,

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1 and these are very brief issues, it would help me resolve in
2 my own mind whether the containment crack issue needs to be
3 reopened, whether that could be done today while he is still
4 here so that if there needed to be some questions, they could
5 take place on the record today.

6 (Board conferring)

7 JUDGE BECHHOEFER: Do you have other questions other
8 than this? During the break we could explore that.

9 Mr. Miller?

10 MR. MILLER: I have no questions.

11 JUDGE BECHHOEFER: I think we have plenty of time
12 this afternoon. This could be explored on a break.

13 MR. GADLER: Your Honor, it seems to me that what
14 Mrs. Stamiris has brought up has safety-related implications.
15 I do not understand why it would not be explored by your Board.

16 JUDGE BECHHOEFER: We have explored this matter to
17 some extent in the past. We issued a fairly extensive ruling
18 on this. Do you have other questions other than those?

19 MS. STAMIRIS: No, I don't have any other questions
20 for Mr. Kane other than that.

21 (Board conferring)

22 JUDGE BECHHOEFER: One more thing before we go on
23 break, or maybe during the break. Has anybody tested out the
24 speakerphone system to see whether it will work here?

25 MS. WRIGHT: The speakerphone will not work on the

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1 that in mind, that was the definition that I, of course, had
2 for through cracks. I have a document which I can show to
3 all of the parties now. I do not have a lot of copies, but
4 Mrs. Sinclair just made some copies for me. It is dated
5 August 11, 1983, and it comes from Eleanor Adensam, and it is
6 a letter to Mr. Cook, the subject of which is request for
7 additional information regarding seismic margin review,
8 Volume II, reactor containment building.

9 On the last part of the enclosure with this letter
10 is a reference to through cracks in the containment structures.
11 To me that seems to be very serious and very significant, and
12 in reviewing all of the responses and affidavits attached to
13 the responses to my motion on the containment cracks, there was
14 a lot of discussion by both the NRC and the Applicant as to
15 the width of the cracks in the containment. I never did see
16 a reference to anything about the depth of the cracks in the
17 containment.

18 Mr. Kane indicated to me that he did not know whether
19 the containment cracks were through cracks or did not have any
20 more information. I did not really show him this memo, but I
21 would like to, if the Board permits, share a few copies of
22 this August 11th memo and then pursue my line of questioning
23 as to whether I can go into the question.

24 THE WITNESS: I would like to respond --

25 MS. WRIGHT: Judge Bechhoefer.

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1 THE WITNESS: I would like to respond to what
2 Mrs. Stamiris has said. With the problem of through cracks
3 and what has actually caused them, I have indicated in my
4 opinion and have stated in my affidavit that they were not
5 related to the settlement, and I indicated the problem with
6 through cracks and how they are to be addressed is merely
7 a structural engineering question, and that is what I had
8 indicated.

9 In the document she is now referring to from Eleanor
10 Adensam, if I am correct, they were questions raised by the
11 structural engineering people.

END 8

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1 (Board conferring.)

2 JUDGE BECHHOEFER: Ms. Stamiris, let me inquire
3 how this could affect your -- your proposed reopening of the
4 record was based on some relationship to dewatering, as I
5 understood it -- that is, the theory upon which the Board
6 acted, actually.

7 Mr. Kane is saying there is no relationship to
8 dewatering.

9 How could this change anything?

10 If the document deals with something that the
11 structural engineers have raised, I do not think Mr. Kane is
12 the one to answer questions about them.

13 MS. STAMIRIS: Perhaps Mr. Kane is not the correct
14 person to answer questions on this. But the reason I raised
15 this is because, to summarize my understanding of the
16 Applicant's position with regard to the containment cracks,
17 they were not safety significant.

18 I believe they attributed them to being like --
19 most probably being volumetric or shrinkage cracks in the
20 containment concrete.

21 And I wondered if, indeed, it were established that
22 these were through cracks in the containment. I wondered if
23 that would change Mr. Kane's assessment as to whether or not
24 they could be volumetric or shrinkage cracks and perhaps be
25 more likely be due to dewatering or some other reason?

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1 (Board conferring.)

2 MR. HASSELL: Judge Bechhoefer, if I may add a
3 few comments -- briefly, at least from what I have heard, it
4 sounds like this matter -- from Staff's view, it sounds like
5 it is beyond the Peck affidavit.

6 And secondly, as Mr. Kane has indicated, he, in
7 effect, does not have expertise in this area to even offer
8 judgments in that area.

9 I am at a loss as to how Ms. Stamiris finds this
10 would be within the scope of this limited evidentiary hearing
11 today.

12 MS. STAMIRIS: I would like to respond by saying
13 I agree it is beyond the frame of the testimony that Mr. Kane
14 came prepared to address today. And I think I presented it
15 as such when I basically sought permission to go into another
16 area and explained why at the end of my other questions.

17 But what bothers me about this whole thing, I
18 guess, more than anything else is if it is not Mr. Kane's
19 position and expertise to make this kind of an assessment
20 about the containment cracks, then why -- it does not seem
21 like he should make -- it seems like any assessment by
22 Mr. Kane -- and there was an assessment made -- should not
23 be made if this is not his area of expertise.

24 What I remember -- and I could take a minute to
25 find it if -- I think that would be helpful if I found

1 Mr. Kane's affidavit and read you the one sentence in his
2 affidavit that I am concerned with.

3 MR. MILLER: Judge Bechhoefer, the ground rules
4 have really shifted quite a bit, because what we have now is
5 a ruling by the Board based on Ms. Stamiris' representations
6 that she was not seeking to add new contentions, but simply
7 to adduce new evidence on existing contentions. The conten-
8 tion it was tied to was dewatering -- if that is the analysis
9 which everybody gave to the request that the work be
10 reopened.

11 Mr. Kane has just stated on the record, in response
12 to Ms. Stamiris' initial remarks, that he does not see any
13 relationship between dewatering and the through cracks that
14 are referred to in the piece of correspondence identified
15 by Ms. Stamiris.

16 I think that should probably be the end of the
17 discussion.

18 If there is some other basis for considering
19 containment cracks, I think, once again, that we ought to
20 have the motion made in writing, and the Staff and the
21 Applicant will respond. And that will clearly be a late-
22 filed contention. And the Board will be able, then, to
23 decide whether the standards for admitting late-filed
24 contentions would be met.

25 JUDGE BECHHOEFER: I might say that the Board views

1 the motion to reopen the connection to dewatering as the
2 only reason why we would even be exploring the settle,
3 rather than the OL portion of the proceeding. We did not
4 view it as a motion to admit a new contention on containment
5 cracks.

6 If there were information justifying that, we
7 would, of course, consider it, and people could respond, as
8 well.

9 Without any relationship to dewatering, there
10 would not be any relationship to the OM record, as far as
11 we can see it. I think we based our order, in large part,
12 on that reasoning.

13 MS. STAMIRIS: I understand that, and I made that
14 assumption in the first place.

15 I cannot find the sentence I was about to read,
16 and I wish I had been able to just find that one sentence,
17 the one Mr. Miller interjected when Mr. Miller interjected
18 with his response. But I remember a sentence in Mr. Kane's
19 affidavit which basically said, "I have not done an investiga-
20 tion, but I have concluded." So, we cannot conclude what they
21 are due to, but I conclude that they are not due to
22 settlement. And it seems to me that if an investigation has
23 not been done, if the statement is made that you do not know
24 what they are due to, how can you make a statement that you
25 know they are not due to something else?

1 And that is the basic thing that I have a problem
2 with, with Mr. Kane making the affidavit on the position that
3 he did.

4 There is some certainty that it is not due to the
5 dewatering effects. I do understand that the dewatering
6 effects are within the anticipated ranges. But I believe
7 that in something as serious as this that the whole picture
8 needs to be looked at and studied very carefully to
9 determine whether or not there is some gray area, some
10 complicated interaction between, just hypothetically -- well,
11 it is not hypothetical -- there was missing rebar in the
12 containment.

13 And because there has been structural reenforcement
14 that has been lacking, found to be lacking in the containment
15 structures historically, maybe that had something to do why
16 an expected amount of settlement could have an unexpected
17 effect.

18 (Board conferring.)

19 JUDGE BECHHOEFER: We would have to have consider-
20 ably more evidence to that effect. And Mr. Kane has testified
21 that the cracks are not related to dewatering.

22 I do not think we should explore this any further
23 at this time.

24 If you really find information, you could submit
25 a late-filed contention -- and you know how to justify that --

1 and we will consider it.

2 I think you would need considerably more than just
3 speculation. Maybe there will be further investigations of
4 these cracks. In fact, I was told that was continuing.

5 Maybe when those reports come out, you can look
6 at them.

7 I cannot say that we will accept or not accept
8 the contention. We cannot commit ourselves in advance.

9 Do you have further matters to ask Mr. Kane about?

10 MS. STAMIRIS: I do not have any further questions.

11 MR. BECHHOEFER: Ms. Sinclair?

12 MS. SINCLAIR: Yes.

13 BY MS. SINCLAIR:

14 Q I am sure you are acquainted with Staff Exhibit 16
15 that indicated the amount of settlement of the diesel
16 generator building that was given to us in December of '82.
17 this particular --

18 MS. WRIGHT: Excuse me. Could Ms. Sinclair
19 identify the document?

20 MS. SINCLAIR: Staff Exhibit 16.

21 THE WITNESS: Am I correct that it is the
22 settlement issued for marker DG-37

23 MS. SINCLAIR: Yes.

24 THE WITNESS: I am familiar with it.
25

1 BY MS. SINCLAIR:

2 Q This was distributed last December; isn't that
3 true?

4 A That is correct.

5 Q Was this whole study, then, commissioned in order
6 to answer why we have this extensive settlement chart?

7 A The study that was furnished, the March 4th report
8 and affidavit of March 4th, is in response to that question,
9 yes.

10 Q Do you know if there is another chart that would
11 show us whether this settlement has tapered off or if this
12 continuous line of further settlement is continuing?

13 A I am aware that there are more recent charts of
14 the settlement for that marker which are available to the
15 Applicant.

16 And actually, I was furnished revised settlement
17 plots at the design audit last week. And for DG-3, it does
18 show a leveling off.

19 Q does show a what?

20 A A leveling off.

21 Q So, the continuous drop that we view here is not
22 continuing any further?

23 A That is correct. If I am not mistaken, the
24 exhibit that you have is either just prior to February of '82
25 or shortly thereafter. I don't think that it includes the

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1 I don't think that it includes the rebound of the groundwater
2 table. And when it was allowed to rebound, more recent plots
3 than tha are available in this March 4th, 1983 report. I
4 think it is Figure A to -- it is -- it gives further settlement
5 history for DG-3 in this report.

end 9

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1 You can see in Figure A-2 that it did level off.

2 Q Do I have the right one, A-2?

3 A A-2, yes.

4 Q There is a rebound and then a sharp drop again.

5 A And then it levels off. Actually, the sharp rebound
6 is recognizing that the groundwater table is being drawn down
7 again.

8 Q Which are you talking about, the settlement or the
9 dewatering?

10 A I am now talking about the settlement. After 1000
11 days there is a period of settlement history that goes into
12 a steep slope. That was the steep slope that was presented
13 to Dr. Peck. And then the groundwater table was allowed to
14 rebound, and there is a period or rise in the settlement plot,
15 and then the groundwater table is again drawn down and the
16 settlement now proceeds.

17 The rate of settlement after, say, about 1200 days
18 is flatter in slope than it is immediately after the 1000.

19 Q Is this the most recent data that you have?

20 A No, it is not the most recent data. This is further
21 than Exhibit 16, and I have provided further information than
22 this.

23 Q What does the most recent data show?

24 A It shows a rate of settlement that is flatter than
25 the steeper slope after 1000 days.

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1 Q Is it still in a downward trend?

2 A Yes, it is.

3 Q Do you view that as very significant as far as
4 integrity of the structure of the diesel generator building
5 is concerned?

6 MR. MILLER: I am going to object to that question.
7 It is going beyond the scope of Mr. Kane's direct testimony
8 and is inquiring into something as to which he made an
9 express disclaimer earlier on in his testimony with respect to
10 the structural issues.

11 JUDGE BECHHOEFER: I think you probably should
12 rephrase that because as phrased, it goes into matters which
13 he has not looked into.

14 JUDGE HARBOUR: Phrase it, if you can, in terms of
15 his testimony and his expertise as a geotechnical engineer.

16 BY MS. SINCLAIR:

17 Q As a geotechnical engineer that has had serious
18 reservations about using predicted settlement values as against
19 measured settlement values, do you consider this latest data
20 on the diesel generator building as significant as far as the
21 structural integrity of the buildings are concerned?

22 MR. MILLER: Same objection.

23 MS. SINCLAIR: Then I guess I don't know how to
24 rephrase it.

25 JUDGE BECHHOEFER: Pardon?

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1 MS. SINCLAIR: Then I guess I do not know how to
2 rephrase it in terms of what is required here. I would like
3 some assistance from the Board.

4 JUDGE HARBOUR: I will try to rephrase it. It may
5 not be what you are after.

6 Does the recent settlement data at DG-3 indicate
7 a trend which you find acceptable or unacceptable in terms of
8 the settlement of the foundation at the diesel generator
9 building?

10 THE WITNESS: I find the trend to be steeper than
11 what I would have anticipated, but I also find the trend to
12 be very close to what is being predicted by the secondary
13 consolidation straightline.

14 My conclusion, then, using the prediction at this
15 particular time is very close to what is happening. We are
16 not getting more settlement than we expected; it is just
17 that it was thought to be conservative when we used the
18 straightline for the surcharge still in place.

19 Does it give me concern? Yes. I would want to
20 continue to watch it to make sure it did not go back into its
21 steep slope. I would want to make sure that our predicted
22 settlement is conservative and the future settlement. Yes, I
23 would want to continue to check it.

24 BY MS. SINCLAIR:

25 Q Can you tell me if this report that Dr. Peck has

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1 put together relies on his predicted settlement values or on
2 the measurement settlement values that you thought were
3 essential to consider?

4 A We are talking about Dr. Peck's input into the
5 March 4th report. He addresses both measured settlements and
6 predicted settlements. He uses the measured settlements to
7 make certain conclusions with respect to the adequacy of
8 future settlements. He uses both measured settlements and
9 predicted settlements.

10 Q So, you personally do not have any questions about
11 the data base that he used for developing his report?

12 A I accepted the data base as being accurate as being
13 presented by the Applicant. I have no reason to question it.

14 Q On page 2 of the analysis under analysis of the
15 diesel generator building dewatering settlement report, it says
16 the DG markers and the -- first paragraph. In lines 13 and
17 14, it says that both the DG markers and the BA-8 and BA-53 are
18 monitored by optimal survey. And further down about two
19 sentences, another sentence down, it says -- next it talks
20 about the BA-61 and BA-64, and it says those are monitored
21 directly with a height gauge, allowing a greater degree of
22 accuracy than optical survey.

23 Do you think that the questions about optimal
24 survey being as accurate as the measured data could alter the
25 findings? Would there be enough questions about optical

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1 survey to alter the findings of the alternate report?

2 A It is my understanding the optical survey is accurate
3 to within one-thousandths of a foot. It is my understanding
4 the dial gauge is accurate to one-thousandths of an inch. On
5 that basis, the dial gauge would be more accurate. In my
6 estimation, in what we are trying to do here with respect to
7 evaluating the effect of the steepening slope, both types of
8 information are acceptable.

9 Q In Staff Exhibit 16, my notes say that there was a
10 two foot, four inch drop from the time the surcharge was
11 removed on September 14, 1979 and to the end date of this
12 particular chart, which is October 1982, this last fall. That
13 is two feet, four inches in drop. Does that seem reasonable
14 to you?

15 A I am not sure what you are reading from, 2.4 feet
16 drop. 2.4 feet drop does not seem reasonable to me.

17 Q This is why I would like to understand this chart
18 better, because it says 620 elevation, and this is settlement
19 in inches, and that has 592 down here, and that is 28 inches
20 all together. Is that what this is?

21 MR. HASSELL: I suggest that Mrs. Sinclair can
22 provide a copy of it.

23 MS. SINCLAIR: I am sure Staff would have the
24 exhibit.

25 MR. HASSELL: I do not have one with me, unfortu-
nately.

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1 MS. SINCLAIR: The Staff did not bring an exhibit
2 that is the basis for this report that we are dealing with?

3 MS. WRIGHT: We have a revised, updated copy of the
4 drawing. I assume you have notes on that that you are also
5 referring to.

6 MR. LEWIS: Do you object to providing it to the
7 witness?

8 MS. SINCLAIR: No, I don't.

9 (Handing document to witness)

10 (Pause)

11 MR. HASSELL: If there is a question, it should
12 be stated on the record and the response should be on the
13 record. We have not gone off the record.

14 THE WITNESS: May I attempt to help by indicating
15 what I understand Mrs. Sinclair is asking so that I can answer?

16 MR. HASSELL: It is her examination.

17 BY MS. SINCLAIR:

18 Q Dr. Kane, would you explain Staff Exhibit 16, which,
19 as far as I am concerned and from what I can read on it, says
20 that when the surcharge was lifted, the data given is 620, and
21 when the chart ends in its data base, which was supposed to be
22 October of '82, the number is 592. And this chart indicates
23 settlement in inches, which to me would indicate that there is
24 28 inches between 620 and 592.

25 A The clarification that I think would be helpful is

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1 that the plot uses settlement which appears to be plotted on
2 a scale of one inch equal to half an inch of settlement.
3 The figures that Mrs. Sinclair is referring to give elevation.
4 Those elevations are not related to the settlement. They are
5 actually the groundwater elevation as the groundwater was
6 withdrawn. The difference between groundwater elevations
7 would not give you the settlement.

8 This note refers to these values.

9 MR. MILLER: Are you referring to the note at the
10 bottom of Staff Exhibit 16 that indicates that the small
11 arrows on the chart indicate approximate groundwater eleva-
12 tions?

13 Did you hear my question, Mr. Kane?

14 THE WITNESS: Yes. What Mr. Miller has said is
15 correct in that the large numbers that are at the lower portion
16 of the plot are groundwater elevations. There is a note that
17 explains that they are groundwater elevations. The upper
18 part of the plot is settlement that is plotted to a different
19 scale.

end 10

1 BY MS. SINCLAIR:

2 Q What is the scale? Does it give that?

3 It says "settlement inches."

4 A Right; from this time period to this time period.

5 (Indicating.)

6 We are talking about 6/10ths, 7/10ths of an inch.

7 Q So, these numbers really -- these numbers do not
8 really relate to the settlement at all?

9 A They relate in the sense that they are trying to
10 indicate the time frame when -- when the groundwater lowerings
11 took place. That is the purpose of the numbers.

12 Q Do you anticipate that the dewatering in the area
13 of diesel generator building in the future will be less than
14 it will be in other parts of the plant?

15 A I would estimate that the dewatering will be
16 essentially uniform, but not completely uniform. The
17 dewatering which is going to be required during plant operation
18 has been in operation and drawn down to a level of elevation
19 around 590, which is what it will be during plant operation.

20 So, the dewatering has -- the dewatering has the
21 major impact. So, future settlements will be small.

22 But I think your question is do I expect to be the
23 same all over or different at the diesel generator building.
24 I would say there may be some slight differences.

25 What we are talking about is very small, amounts of

1 settlement due to dewatering. And there may be some small
2 differences in that that may be from location to location.

3 Q Can you tell us what the effect on the underground
4 installations has been with this steep slope in the rebound
5 and then the slope after that?

6 A The question is, recognizing the discussions we
7 have had on the steep slope, how have they impacted the
8 underground excavation.

9 Q "Installations."

10 A To my understanding, they have not impacted them
11 at all.

12 We are talking about two different things. We are
13 talking about settlement behavior at the diesel generator
14 building, as measured by markers on the diesel generator
15 building, which is where the steep slope came from.

16 And then, when we start talking about underground
17 excavations, we are talking about the auxiliary building and
18 the service water pump structure, which have portions that on
19 deeper foundations. There is not a direct comparison.

20 Q Are there any underground installations under the
21 diesel generator building itself that would be affected?

22 A There are safety-related conduits and pipes that
23 would be affected by the settlement.

24 (Counsel conferring.)

25 Q Do you know if any studies were done on the

1 underground installations and what happened to them during
2 this period?

3 A Studies with respect to the effect of the
4 steepened slope on the underground excavations? Do I
5 understand that --

6 JUDGE HARBOUR: I think she said "installations."
7 Are you referring to the things which are
8 underneath the diesel generator building?

9 MS. SINCLAIR: Yes.

10 JUDGE HARBOUR: Not "excavations."

11 THE WITNESS: I appreciate the clarification.

12 MS. SINCLAIR: "Installations."

13 THE WITNESS: Additional, to my knowledge -- an
14 additional look at the effects that the settlement has on
15 installations beneath the diesel generator building, to my
16 knowledge, it has not been made.

17 MS. SINCLAIR: I guess I have no further questions.

18 MR. GADLER: I have some more questions.

19 (Board conferring.)

20 JUDGE BECHHOEFER: Colonel Gadler, you should have
21 finished. And your turn was first.

22 MR. GADLER: Pardon?

23 JUDGE BECHHOEFER: You started asking questions
24 first, and you should have finished your questions first. We
25 will let you ask a few more.

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1 Normally, each party has one turn.

2 MR. GADLER: Thank you, Mr. Chairman -- or
3 Your Honor.

4 BY MR. GADLER:

5 Q Mr. Kane, this diesel generator building
6 dewatering settlement report states that dewatering will be
7 continued for 40 years.

8 In your judgment, is that necessary?

9 MR. MILLER: I am going to object. This is well
10 beyond the scope of Mr. Kane's direct testimony, and it goes
11 into matters that were fully explored on this record in an
12 earlier evidentiary session.

13 JUDGE BECHHOEFER: That's true, we have covered
14 that.

15 BY MR. GADLER:

16 Q Mr. Kane, do you know how many wells will be
17 required for the continued dewatering of the plant?

18 MR. MILLER: Same objection.

19 (No response.)

20 BY MR. GADLER:

21 Q Mr. Kane, what would happen if --

22 MR. BECHHOEFER: Sustained.

23 BY MR. GADLER:

24 Q -- discontinued now or within a few years?

25 MR. MILLER: Could we have a further clarification

1 of the question?

2 I will object on the grounds that it is vague
3 unless there is some specification of the effect.

4 JUDGE BECHHOEFER: I was going to ask if a
5 discontinuance of dewater at any point could affect any of
6 the slopes that we are now evaluating?

7 THE WITNESS: The question is would the
8 discontinuing of dewatering affect the slopes. The answer
9 would be yes. If we discontinued dewatering, we would allow
10 the groundwater table to rise, and we would perhaps get a
11 slight rebound as the groundwater table would rise.

12 It would affect it, yes. It would affect it in the
13 sense that it would stop settlement and actually allow some
14 of the rebound that has already occurred.

15 (Board conferring.)

16 JUDGE BECHHOEFER: You cannot answer that within
17 your expertise -- to the extent you can answer it.

18 THE WITNESS: I think it is partly within my
19 expertise and that what we are saying is that settlements
20 are changing what is likely -- what is it likely to do to the
21 structure if the settlement that is occurring is inducing
22 stresses into the structure and those settlements are
23 arrested and allowed to rebound. There may be reduction in
24 stresses in the structure.

25

1 BY MR. GADLER:

2 Q Mr. Kane, what are the safety implications of the
3 differences in settling of fill or natural material?

4 A What is the difference in settling between fill
5 and natural materials. Mr. Gadler, I am sure you must
6 recognize that you could get a wide range of fill and a
7 wide range of natural soils. And so, the differences in
8 settlement would be very much dependent on that wide range.

9 If you want me to put upper bounds on it, it has
10 been my experience that I can compact a fill, whether it be
11 cohesionless or cohesive, to a large density, compact material,
12 to where settlements would not be a problem. To me, that is
13 the upper range -- the upper range of natural soils, I
14 think. We would see the upper range of settlement in the
15 type of material we have in Midland, in the natural soil of
16 the glacial till. It is a dense material.

17 We can go to the other extreme, where we have soft
18 natural materials.

19 Q Mr. Kane, what effect does the freezwall have on
20 dewatering?

21 A The freezwall is a supplement to the dewatering
22 operations at the Midland plant to control movement of
23 seepage into the excavations for the underpinning work.

24 So, the freezwall is an addition which is
25 intended to help control seepage.

1 Q Is there any relation between the elevation of the
 2 Tittabawassee River and the dewatering requirements of the
 3 plant?

4 MR. MILLER: I am going to object again. This is
 5 beyond the scope of Mr. Kane's direct testimony. I am sure
 6 whether this precise question was asked in the earlier
 7 evidentiary sessions, but certainly it was at least open for
 8 questions at that point in time.

9 (Board conferring.)

10 BY MR. GADLER:

11 Q Mr. Kane, do you know of the elevation of the
 12 Tittabawassee --

13 MR. HASSELL: There is a question pending. The
 14 Board is about to rule.

15 MR. GADLER: He objected, so I thought --

16 JUDGE BECHHOEFER: I have to rule first.

17 MR. GADLER: I see. I'm sorry about that.

18 (Board conferring.)

19 JUDGE BECHHOEFER: Let me ask Mr. Kane something
 20 alternatively.

21 Do the groundwater curves in this report have any
 22 relationship -- do you know whether they have any relation-
 23 ship to the level of the Tittabawassee River, the groundwater
 24 levels?

25 THE WITNESS: I would say they have a relationship.

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But in my estimation, it is minor to the relationship that would be developing off the cooling pond. In other words, I feel the cooling pond level is influencing the seepage at the diesel generator building more than the natural level in the Tittabawassee River is.

end 11

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1 BY MR. GADLER:

2 Q Over the years, the book here says you are going to
3 need this dewatering thing for the life of the plant. If that
4 is true, will the dewatering that is necessary increase as
5 time goes on due to the impact of that lake on the plant
6 soils?

7 A The need for the dewatering will not increase. The
8 reason for that is we have attempted to identify the areas of
9 loose sands which are the problem under earthquake loading.
10 There were several areas. Many of those areas have been fixed
11 by some remedial measures such as the service water pump
12 structure, but there are two areas, the diesel generator building
13 area and the railroad bay area, which are relying on the
14 operation of the dewatering system; and so I do not see any-
15 thing in the future which would tell us we need to expand the
16 dewatering system.

17 MR. GADLER: I think that's all. Thank you.

18 JUDGE BECHHOEFER: Mr. Miller.

19 MR. MILLER: I have no questions of Mr. Kane.

20 (Board conferring)

21 MS. STAMIRIS: Judge Bechhoefer, I had forgotten
22 there were two issues that Mr. Kane was going to look into at
23 the break. One had to do with Judge Harbour's previous
24 question, and I forgot to raise that. Should I do that now?

25 JUDGE BECHHOEFER: Do that now.

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1 BY MS. STAMIRIS:

2 Q Mr. Kane, did you have a chance to review those
3 transcript pages and to refresh your memory about the questions
4 about secondary consolidation versus settlement from dewater-
5 ing?

6 A I did review the transcript, yes.

7 Q Did you -- having had that opportunity to study the
8 report by Dr. Peck, did you look into this question any
9 further as to what percentage or what part of the settlement
10 might be attributable to a secondary consolidation as opposed
11 to dewatering effects?

12 A No, but I would like to explain what I understand
13 by Judge Harbour's question. It has been indicated that there
14 is a coefficient of secondary consolidation, and I think the
15 value that was in the exhibit that was related to the marker
16 on Exhibit 16 indicates that it is 1.25 inches. What that is
17 saying is that over a log cycle, that would be the coefficient
18 of secondary consolidation, and Judge Harbour's question
19 says, suppose in what developed, that was doubled, that became
20 2.5, now would you say half of that is dewatering and half
21 of it is secondary consolidation?

22 My answer to that would be the time frame that you
23 would get the settlement, the secondary consolidation, would
24 be much different, in my estimation, than the time frame
25 that you would be getting it for dewatering. They would not

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1 be occurring at the same time frame and they should not be
2 half, and you would not, if it doubled, say half is dewatering.
3 I think what you would be forced to do would be to go, and
4 whatever settlement has occurred, find the cause, similar to
5 what was done in the March 4th report, and that is evaluate
6 dewatering, the records and what is the actual dewatering
7 at this time, is it related to settlement, and if it is,
8 perhaps you can explain it that way or there might be some
9 other reason that you would have to investigate.

10 Q So with the data that you were presented in reviewing
11 this March 4th study and the time frames that it occurred in,
12 did you rule out that this would be then due to any kind of
13 secondary consolidation?

14 A I think part of the settlements being measured
15 includes secondary consolidation. It is going on. In my
16 estimation it is a much smaller part than the part that has
17 been caused by dewatering. It is part of the settlement.

18 Q Do you have a rough estimate, a ballpark figure as
19 to maybe what percentage might be secondary consolidation, in
20 your judgment?

21 A I do not have any rough ballpark figures, but it
22 would be easy to know the period of time that we are talking
23 about and look at what secondary consolidation would be, but
24 I think it would be less than five-hundredths of an inch.

25 Q Thank you.

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1 MR. MILLER: What would be less than five-hundredths
2 of an inch?

3 THE WITNESS: The part attributable to secondary
4 consolidation.

5 MR. HASSELL: May I raise what I perceive as a
6 concern about what seems to be related to Mr. Kane's testimony?
7 That is, as I understand it, the Peck affidavit and the
8 report that is not attached, it is not part of the evidentiary
9 record, but obviously, all of this presentation has been
10 related to this document. I am concerned from the standpoint
11 of a complete record before the Board, a record that the
12 parties can scrutinize and understand. I am raising the
13 problem: I am not so sure what the resolution should be.

14 JUDGE BECHHOEFER: The Board discussed this. If it
15 were put into the record through Mr. Kane, we could not give
16 any weight to the statements of the report itself. We could
17 give weight to what Mr. Kane testified about them. The
18 report has not been subject to cross-examination. I do not
19 know if it should be put into the record or not. If the
20 Applicant wishes to have it in the record, it can be put in.
21 It would be difficult to rely on the statements in there
22 for the truth.

23 MR. MILLER: It does not detract from any earlier
24 conclusions expressed by either Mr. Kane or Dr. Peck based on
25 data that they had at an earlier time, so I don't feel the

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1 need to supplement the record with this information. If all
2 of the parties would stipulate that it can be admitted into
3 evidence, the Board can make such use of it as it saw fit.
4 Failing that, we have no plans to bring Dr. Peck back to
5 sponsor the affidavit.

6 JUDGE BECHHOEFER: I am aware of that.

7 MR. HASSELL: All right.

8 JUDGE BECHHOEFER: Would the parties prefer it to be
9 in the record? Its use would be somewhat limited. It could go
10 in as the document that Mr. Kane reviewed and expressed an
11 opinion on.

12 MS. STAMIRIS: I think it would be helpful if this
13 did accompany the record just for purposes of clarity, as Mr.
14 Hassell pointed out. I would be willing to stipulate that it
15 be admitted into evidence on the basis of Mr. Kane's responses
16 to it, aside from Dr. Peck's sponsorship of this document.

17 (Board conferring)

18 JUDGE BECHHOEFER: Just for clarity, would the Staff
19 wish to sponsor it and then the Applicant can provide the
20 copies? For numbering purposes, should we put a Staff number
21 on it? We would have no problems.

22 MR. HASSELL: It could be marked as Staff Exhibit
23 23, which I think is the next number. In effect, it would be
24 marked for identification but not admitted? Is that what you
25 are suggesting?

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1 JUDGE BECHHOEFER: We would admit it. The use of
2 it might be somewhat limited. I do not believe that Mr. Kane
3 has contradicted anything in there. The record would
4 establish that the Staff has reviewed this.

5 MR. HASSELL: I was just trying to point out something
6 that may have not been considered. To the extent that the
7 Board has considered it and the Board feels it is not necessary
8 to have it in the record, that is the Board's judgment.

9 JUDGE BECHHOEFER: It could be useful. I don't know
10 that it is necessary. It could be useful if someone wants
11 to refer to it.

12 (Board conferring)

13 In terms of appellate review, it might be better to
14 have it in the record. We would certainly, before relying on
15 it, we would certainly indicate the use we would make of it.
16 We would certainly rely on Mr. Kane's testimony about it.
17 We will identify and admit this in evidence as Staff Exhibit
18 23.

19 (The document referred to was marked
20 Staff Exhibit No. 23 and received in
21 evidence.)

22 MR. MILLER: I'm not certain that we can supply
23 sufficient copies for the reporter at this point in time.

24 JUDGE BECHHOEFER: I believe all parties have
25 copies, and the Board has copies.

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1 MR. MILLER: We can handle that, then.

2 BOARD EXAMINATION

3 BY JUDGE HARBOUR:

4 Q Is it true that the Peck report, which you have
5 reviewed, ascribes a certain amount of settlement to the
6 natural fill?

7 A Yes.

8 Q Is the term "compression" -- would you explain
9 the difference between what is meant in the report by
10 compression of natural fill and what we would see as settle-
11 ment at the settlement markers?

12 A Compression of the fill is when the fill under
13 loading reduces in vertical height. It may be elastic or
14 not elastic. Consolidation would be when it is not going to
15 rebound under removal of loading.

16 So to answer your question, compression is referring
17 to the change in vertical height in a soil due to loading.
18 We measure the settlement of the markers by either the
19 anchors or survey, and what we are measuring is the change
20 in vertical height of the structure because of the compression
21 in the soil.

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1 On the borros anchors, to what point in elevation
2 was the borros -- did the settlement measurements apply?

3 For example, the settlement markers are given as --
4 I believe the statement is that there is a tip elevation,
5 borros anchor number 8 of 594.3 feet.

6 Does that elevation, then, mean essentially that
7 is the biggest marker, that elevation, and the settlement is
8 measured from that?

9 A I think I should talk about borros anchors, BA-8,
10 BA-53. Their tip elevation is 594 -- elevation 594 and 598.

11 What it means is stiff steel rod has been driven
12 and found at that elevation -- that is, the bottom of it.
13 That is the tip elevation.

14 And then, the rod extends to the inside, the
15 diesel generator building.

16 A survey is made, by surveying techniques, of the
17 change in elevation at the top of that rod, which is founded
18 at the tip elevation.

19 And so, for borros anchors 8 and 53, what is being
20 measured is the settlement below that tip elevation, which
21 is the natural soils. 594 and 598 are below the bottom of
22 the fill and just approximately at the top of the natural
23 soil.

24 So, we are measuring those particular borros
25 anchors, the settlement that is in the natural soil.

1 The other borros anchors, the 61 through 64, are
2 founded at approximately elevations 535. They are felt to
3 be deep enough in the natural hard soils that they are
4 relatively unaffected by the settlement of the diesel
5 generator building.

6 What is being implied here is that the settlement
7 that is occurring below that is minimal and not a factor.
8 And those rods extend to the diesel generator building.
9 And then, this dial gauge measures the settlement relative
10 to that rod.

11 And so, what is being said is that the settlement
12 of the diesel generator building that is being measured is
13 the fill and the till, down to elevation 535.

14 Q Is there a diagram in this report which you have
15 reviewed that indicates vertical motions of borros anchor 61,
16 not motions of something relative to that but actual vertical
17 motions of borros anchor 61?

18 A The assumption that is in the report is that it is
19 fixed and not moving. I feel that there were some statements
20 made at the end of the report that said that is the assumption,
21 that it is recognized, based on the comparison with other
22 data, that if it were to move, it would be very small, very
23 minimal.

24 Q In your review of the report -- this is a
25 clarification question. In your review of the report, do you

1 agree that the groundwater level plots, as a function of time,
2 accurately reflect groundwater variation as a function of
3 time at the diesel generator building?

4 A Yes.

5 BY JUDGE BECHHOEFER:

6 Q Mr. Kane, I want to follow on a little with
7 questions that Ms. Sinclair was asking you earlier.

8 Turn to Drawing A-2. You were asked some questions
9 that centered on that drawing, which is -- it concerns
10 marker DG-3.

11 A Yes.

12 Q It looks, to me -- maybe I'm looking at it wrong.
13 And if so, correct me. It looks to me that the slope,
14 starting at day 1000 -- not using the steep slope that
15 immediately follows that -- if you connect the various points,
16 starting at 1000, it looks like the slope is much steeper
17 than the line, which is labeled "Settlement Per Log Cycle."

18 I wanted you to comment on that and connect it
19 with what you testified, in response to Ms. Sinclair, about the
20 degree of slope -- the degree of settlement.

21 A The straight line that is drawn on this plot that
22 is labeled "Settlement Per Log Cycle," C alpha equals 1.25
23 inches. It is a line that is the predicted secondary
24 consolidation line for marked DG-3, beginning January 26th,
25 1979.

1 In other words, the -- the time where that line
2 was extended from began on that date. And it is the rate of
3 settlement that would be predicted using the secondary
4 consolidation straight line.

5 Now, going to the actual measured settlement values,
6 you can see the slope of that settlement per log cycle curve
7 after 1000 days is steeper.

8 And if it had continued, it would have indicated
9 more settlement than what had been predicted by the flatter
10 slope.

11 The question, as I understand it, from Ms. Sinclair
12 was have I seen more recent data to where I feel comfortable
13 that that steep rate is not proceeding now and the data that
14 I have been given the last week and have only tentatively
15 looked at is -- if I were to slide up this curve that is
16 labeled "Settlement Per Log Cycle" to the curve that is
17 developing because of actual measured settlements, I would
18 find -- I think it is after December of 1981, which is the
19 time where we are projecting future settlements -- that that
20 slope, when I slide it up to the actual measured settlements,
21 would be very close to predict the settlement during that
22 time frame, which is what has really happened.

23 So, what I am saying, even though the measured
24 settlements got steep in the slopes and flatter portions and
25 that is the way it is behaving because of dewatering and other

1 events, there is not a lot of conservatism at this time into
2 the settlements that we feel are proper for a structural
3 analysis and that the predicted settlements at this time are
4 very close to what we have actually measured.

5 Q The thing that gives rise to
6 my question was if you connected the actual measured
7 settlement at 1000 days and then you plotted that with the
8 last X that appears on the chart, if you drew a line, the
9 slope would seem to be steeper than the settlement per log
10 cycle, which is the secondary settlement.

11 A I think you would be right if you
12 did that. It would be another way of saying there is a
13 slope that is occurring -- the rate of settlement that is
14 occurring that has a slope steeper than what was predicted.
15 And so, we would be concerned. That was the very reason that
16 plot was given to Dr. Peck.

17 Q I had thought that was because of the very steep
18 slope that immediately follows 1000 days. I am now talking
19 about connecting the top of that slope with the last
20 measured settlement, which would include the secondary -- the
21 rebound.

22 If you do not include that, even that seems to
23 be steeper than the secondary measured settlement. That is
24 what I wondered, what was your conclusion as to the effect
25 of that and the significance of that?

1 It seems to me it is not settling at the same rate
2 as the secondary consolidation. So, you would have a minus
3 conservatism, so to speak.

4 A For the time frame that you chose to draw your
5 straight line, you would be correct. I was basing my answer
6 on the time that I know we have decided to stop using the
7 measured settlements and start using using the predicted
8 settlements. My recollection is that that was December of
9 1981.

10 What we had agreed to at that time was, up until
11 December 1981, we will use measured settlements. And beyond
12 this, the settlements that we will be required to address in
13 the structural analysis will be based on predicted
14 settlements.

15 What I am saying is if I draw my line, the lower
16 line, from December 1981 to the present time, I will indicate
17 a range of settlement. And I will say that range will be
18 very close to the measured settlements that I -- have
19 occurred now.

20 The difference between what I would do and what
21 you have done is that you are taking your selected time
22 intervals where it is the steepest, and I have selected time
23 intervals where we are using predicted values.

24 BY JUDGE HARBOUR:

25 Q Can you tell me approximately where on -- in days,

1 your time frame would begin on this chart, A-2?

2 A I did it, and I'm now trying to find -- what we're
3 looking for is what is the number of days of December 1981;
4 is that correct?

5 Q Yes.

6 A I think it is around 1069.

7 BY JUDGE BECHHOEFER:

8 Q Would that be about the bottom of that steep
9 slope? Or would you wait for the rebound and start at the
10 top of the rebound?

11 To me, there would be a difference.

12 A I would think it would be about one-third of the
13 vertical distance of the steep slope.

end 13

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1 (Board conferring)

2 THE WITNESS: Would the Applicant care to comment
3 on whether December 31, 1981 response, the 1069 days --

4 MR. HASSELL: Is the witness under oath, unless
5 you want a statement from counsel?

6 (Board conferring)

7 MR. MILLER: We agree that is the appropriate
8 date.

9 JUDGE BECHHOEFER: That is all the Board has.
10 Ms. Wright.

11 MS. WRIGHT: No redirect.

12 JUDGE BECHHOEFER: Any further business?

13 (Discussion off the record)

14 MS. STAMIRIS: I do not have any recross.

15 JUDGE BECHHOEFER: Does anyone have further
16 questions of Mr. Kane?

17 (No response)

18 JUDGE BECHHOEFER: Mr. Kane, you are excused.

19 (The witness was excused)

20 Ms. Stamiris, I guess we are at the point where we
21 will talk about your proposed findings and the Applicant's
22 motion. I might state to start out with that if we conclude
23 the OM record this week, with the exception of the violation
24 issue, we will have to consider later what we do about any
25 so-called Dow issues. I might say there is a possibility that

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1 at least one of those issues might be as appropriate for the
2 OL issue, if we accept it at all, the scheduled portion of it.
3 If we accepted that, it might well be an OL issue rather than
4 an OM issue. We have not certainly decided.

5 In terms of proposed findings, the Applicant would
6 probably be filing proposed filings on QA matters around the
7 end of the year. I do not have a precise date.

8 MR. MILLER: We would be able to improve on that.
9 I would expect it would be the first week in December,
10 including proposed findings on the alleged violation of the
11 Board order.

12 JUDGE BECHHOEFER: We would not really wish to have --
13 we would want to give people plenty of time to look at those
14 findings in terms of considering the technical issues. We
15 certainly did not want -- I think Mrs. Stamiris will have to
16 spend much more time or effort on the QA issues, which is
17 really the heart of her case. We will try to evaluate it in
18 that context. We will also have a week or a week and a half
19 of hearings, whatever it may be, to contend with. Mrs.
20 Stamiris, with that as a possible schedule, your proposed
21 findings on QA, of course, will follow the Applicant. We
22 assume you will file yours before the Staff on that, which is
23 the standard way of doing it.

24 MS. STAMIRIS: I do not believe that is the way that
25 we did it before -- yes, I think that's right.

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1 JUDGE BECHHOEFER: That is the standard way the
2 rules contemplate. We thought for the technical issues your
3 case was a little different, and we have made an exception.

4 MS. STAMIRIS: Mr. Miller, did you say that you
5 hoped to have findings by mid-December?

6 MR. MILLER: By the first week in December.

7 MS. STAMIRIS: Is the due date for the Staff
8 findings on the technical issues November 15th?

9 JUDGE BECHHOEFER: Yes, it is.

10 MS. STAMIRIS: In addressing the Applicant's motion
11 on the length of time for submitting my findings on the
12 technical issues, first of all, I would like to plead very
13 strongly that I be allowed to submit them after the Staff, for
14 reasons of expedience for all parties, and to make it something
15 that I am more able to -- so I am more able to address the
16 technical issues in a better way. I think it would be very
17 helpful to all of us if I could certainly address them after
18 the Staff has submitted their findings.

19 Secondly, I don't believe that there is any prejudice.
20 I do not know -- I believe that it was raised in the Applicant's
21 motion that there was a need felt to get on with these findings
22 and complete them. I would like to state that I believe
23 because of the delays in the construction schedule and the
24 future dates of this plant being 1985 at the earliest at this
25 point, that I do not believe that there is going to be any
prejudice to any of the parties for the number of days, be it

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1 a week or two longer, than the usual time in which to submit
2 findings.

3 Thirdly and, I think, most importantly, I am
4 concerned that I do not want the technical issue findings to
5 overlap or detract from my ability to address the QA issues
6 of those findings and vice-versa. I do not want the fact
7 that QA hearings will be going on in October -- I mean in
8 November -- there is a lot of work to be done in preparation
9 for the QA findings. I think that I should be given as much
10 time as possible in order to address both the technical issues
11 and the QA findings that we are moving to write earlier.

12 Certainly if the QA findings of the Applicant are
13 submitted the first week in December, that would only leave
14 me two weeks in which -- even if I was granted that time
15 following the Staff, that would only give me two weeks to
16 address the technical issues after the Staff has addressed
17 them in response to their findings before I would have to --
18 before the clock would start running on the QA findings.
19 I am very concerned that the two are going to have a negative
20 effect on each other.

21 I would hope that I would be allotted -- I would like
22 to be allotted the full amount of time that I originally
23 requested and was allotted, the 45 days, in which to address
24 the technical findings.

25 Then I would also like the QA findings to be delayed.

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1 or have some equal -- some amount of time tacked onto it,
2 at least my portion of the QA findings or my time for the
3 QA findings, so that did not interfere.

4 If a compromise is necessary and perhaps 30 days or
5 some such time was set aside for the amount of time in which
6 I would file my technical findings, I would hope that the
7 clock would not start running on my QA findings submission
8 until whatever time has passed that I submit the technical
9 findings.

10 JUDGE BECHHOEFER: The way I figure it no if you
11 filed your technical findings on December 15th, which would be
12 two weeks less than you have now, just roughly, the Applicant's
13 findings on QA matters would be in or filed around that time,
14 presumably, and you could start almost immediately on the QA
15 findings. That might work out.

16 MS. STAMIRIS: I thought he said they were hoping --
17 their target date was the first week of December.

18 MR. MILLER: That is correct.

19 MS. STAMIRIS: Instead of December 15th. That would
20 be two weeks lost to me.

21 JUDGE BECHHOEFER: We were thinking at least you
22 might want 30 days for the close of the OM record at least,
23 which would be --

24 MS. STAMIRIS: Are you speaking of QA findings or
25 technical findings?

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1 JUDGE BECHHOEFER: QA now. It is likely it will
2 be November 8th or 9th.

3 MR. MILLER: I don't know if we are talking
4 about much of a difference. I said the first week in December
5 without looking at the calendar. It is probably going to be
6 sometime the week of December 5th. The very next week is the
7 midweek of the month, which includes the 15th.

8 I would like to observe, Judge Bechhoefer, that,
9 for one reason or another, we have had very few hearing days
10 over the summer and into the early fall, and the subject
11 matter which remains with respect to quality assurance and
12 management attitude issues is a discrete issue. Granted,
13 some may try to draw relationships with other facts, but
14 my only point is there is an evidentiary record which we are
15 in the process of trying to put into meaningful form and
16 findings and conclusions of law. I think it is incumbent
17 on the other parties as well to be doing that. It is not
18 unprecedented even if this very proceeding for Mrs. Stamiris
19 operating without counsel to file proposed findings of fact
20 within a relatively short period of time after the Applicant
21 submitted its findings.

22 In terms of construction completion, by and large I
23 regard that as certainly irrelevant. I think there is at least
24 one Appeal Board case that says that the Applicant is
25 entitled to a speedy hearing without regard to construction
completion of the project, and have been considering these

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1 quality assurance and management attitude issues for years
 2 now. There may not be other occasions when the evidentiary
 3 record will have to be reopened. I hope not. But that is
 4 at least a possibility.

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1 When you are looking at 30 percent or 100 percent,
2 you ordinarily would not draw the curtain now on this phase of
3 the hearing and move on to the operating license contentions.

4 JUDGE BECHHOEFER: We would like to be able to write
5 a decision on the soils issues, the QA issues related thereto.

6 MR. MILLER: I think all of the parties want very
7 badly to -- I know the Applicant certainly does -- to have a
8 decision of this Board which is based on its consideration of
9 the evidentiary record as a whole, which deals with the Dec-
10 ember 6, 1979 order. It is important to the Applicant, and
11 I am confident that Mrs. Stamiris wants and decision, too.

12 MS. STAMIRIS: I certainly do want a decision. I
13 do not wish to delay this hearing any more time than has al-
14 ready been put into it, but I am extremely concerned with the
15 limited resources that I have, and the impact that the times
16 lines are going to have, particularly on the QA findings. I
17 do not have anything more to say about the time lines and the
18 statements I want to make in the submissions of technical
19 findings.

20 But I would like to discuss at this time that we do
21 not discuss any further the time lines for submission of QA
22 findings until Ms. Bernabei is present tomorrow, and she is
23 able -- we are able to discuss this together, and then we are
24 able to present our position on that tomorrow.

25 I do not want to blend the two at this point in

1 time. If it is necessary to do so, I have more things I would
2 like to say about the submission of the QA findings and the
3 timing. If I would be allowed, I would prefer to postpone this
4 until Ms. Bernabei is present tomorrow.

5 JUDGE BECHHOEFER: Do other parties have any com-
6 ments? I do not want to get into details on the QA findings
7 at this time, but I was just using this to illustrate what
8 differing demands would be made on people's time during various
9 periods of the year.

10 Do other parties have any comments on the techni-
11 cals findings?

12 MR. MILLER: We would like to have all of the pro-
13 posed findings, including our reply findings, in the Board's
14 hands by the end of the year, so that on your New Year's
15 plate --

16 JUDGE BECHHOEFER: Technical issues?

17 MR. MILLER: Yes, technical issues. That is an in-
18 termediate goal we have set for ourselves.

19 JUDGE BECHHOEFER: I might say that although your
20 proposed findings have us issuing a separate decision on tech-
21 nical issues, that probably will not happen, although things
22 can change.

23 As far as your findings are concerned, it will not
24 matter much. We will decide how many decisions we will issue,
25 and we will tailor the findings appropriately.

1 MR. MILLER: I should apologize for being presump-
2 tious. The way we wrote the opinion section of our proposed
3 findings -- we had to make a decision ourselves as to what
4 way the Board might structure its initial decision. We thought
5 you might do it in two bites rather than one.

6 JUDGE BECHHOEFER: We talked in the past about doing
7 it in two bites. I think we also mentioned that we probably
8 would not do it, because of the overlapping times now. We
9 will have to see in part about the Dow issues which may have
10 some effect on that. Our decision is not definitely made. We
11 are likely not to write more than one soils decision the way
12 thing look now.

13 MR. HASSELL: As I recall the position of Mr. Paton
14 in a prior conference call, it did not differ much from the
15 Applicant's position. I think the only difference was that
16 we did not necessarily agree that there had been simultaneous
17 filing on November 15th. But nonetheless, the Staff agreed
18 with the Applicant that we felt there was too much time given
19 for submission of proposed findings on the technical matters.

20 I really did not have much to add.

21 (Board conferring.)

22 JUDGE BECHHOEFER: The Board is not going to rule
23 this afternoon.

24 Mrs. Stamiris, would you talk over with Ms. Bernabei,
25 and particularly ask her whether you think that a good schedule --

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1 not for QA issues which we have not decided yet, but whether
2 you could have your technical findings in by the 16th of Dec-
3 ember which is two weeks earlier than you now have. We would
4 not necessarily start your time clock on the QA issues after
5 that. We would have to see; that would be very shortly after
6 the QA findings would be filed. It would not be too much dif-
7 ferent. It might allow you a couple of extra days to get
8 things tied up, and that sort of thing.

9 MS. STAMIRIS: I will discuss it with Ms. Bernabei.

10 JUDGE BECHHOEFER: See if December 16th would be
11 okay for the technical findings. We have not definitely made
12 a decision yet. We would not be adverse to something along
13 that line.

14 We will consider the other findings also. We will
15 assume right now that by the 16th you will have your QA findings
16 in hand, the Applicant's findings; if not earlier, at least by
17 the 16th.

18 We want all of the parties to have adequate time.
19 Good findings help us -- not that we intend to copy any of them
20 but it will help us find in the record what various pertinent
21 matters are. At least let's throw that out for consideration,
22 and then we will then consider the QA findings.

23 We would also assume that your QA findings would be
24 in, let's say now later than the 16th. But we could talk about
25 that later in the week.

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1 conclusion of the sessions, the official session.

2 Is there anything beyond that that we have to de-
3 cide?

4 JUDGE BECHHOEFER: Off the record for a minute.

5 (Discussion off the record.)

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1 JUDGE BECHHOEFER: I am informed by the end of next
2 week we should be able to rule on, I guess it is Mrs. Sinclair's
3 motion to reconsider the lawyer-client privilege ruling. I
4 believe that was only Mrs. Sinclair. I would hope by the
5 end of next week we will have a decision out. We are not
6 prepared to do it yet.

7 MR. HASSELL: The Staff has one minor administrative
8 matter we would like to inform the Board about.

9 MS. WRIGHT: By Board Notification 83-109, the
10 Staff advised this Board that the Brookhaven National Lab
11 report would issue 45 working days after receipt of Mr.
12 Landsman's June 27, 1983 letter, which makes the issuance date
13 sometime toward -- it makes the issuance date September 28,
14 1983. Because of some scheduling conflicts, Brookhaven National
15 Labs has told us that they will not be able to issue that report
16 until October 15th, 1983. This statement that I am partially
17 reading to you will be sent to the Board, and there will be a
18 Board notification along with a copy of the Brookhaven report
19 when it is issued, when it is received by the Division of
20 Engineering. I'm sorry. Mr. Landsman's letter was dated
21 July 19.

22 JUDGE BECHHOEFER: Is there anything likely to be in
23 that report that will cause us to have to take any further
24 action along the lines of holding further hearings?

25 MS. WRIGHT: No, sir.

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1 JUDGE BECHHOEFER: We had said that there would
2 have to be something fairly significant before we would do that.

3 MS. WRIGHT: No, sir.

4 I have two other statements to make. The second
5 is that on September 13th we had a conference call and I
6 indicated to you which documents the Dow lawyers, particularly
7 Mr. Sam Haubdd, pointed out to the Staff, and I have provided
8 copies of those documents to the parties and to the Board.
9 What I neglected to state during the conference call was that
10 it was Mr. Haubdd's opinion that Mr. Gaska, who signed the
11 Dow complaint, would not be of any -- was not knowledgeable
12 about the allegations in the complaint. It was his opinion
13 that Mr. Gasks could provide no further information.

14 MR. MILLER: Mr. Gaska's job at Dow is signing
15 complaints only?

16 MS. WRIGHT: I have no idea what Mr. Gaska's job
17 is. All I can tell you is what he told us.

18 MR. MILLER: We have not received -- I'm sure it's
19 just the fault of the mails -- your communication with Dow
20 documents.

21 MS. WRIGHT: I have an additional copy if you would
22 like one.

23 MR. MILLER: Yes.

24 MS. WRIGHT: The third item is that we have copies of
25 the final SALP report, and I would like to distribute them to the
parties and the Board at this time.

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1 JUDGE BECHHOEFER: I take it the Staff will
2 introduce that as an exhibit tomorrow?

3 MR. HASSELL: If the Board desires, we will. It is
4 a function of how far the Board wants to go in covering 'ne
5 matters that are included in the SALP report. If the Board
6 desires, we can.

7 (Board conferring)

8 JUDGE BECHHOEFER: We will expect the report to be
9 put in, not both the preliminary and the final --

10 MR. HASSELL: It was --

11 JUDGE BECHHOEFER: We are not going to permit
12 questioning on areas of the report which essentially we have
13 gone into before, the specific instances. We outlined the
14 scope of the testimony before.

15 MR. HASSELL: That is why I was concerned. As I
16 read the report, there is one very narrow area that this Board,
17 at least in our view, is interested in. The rest of the report,
18 at least in the Staff's view, is not germane to the issues that
19 the Board says it wants to explore. I guess in my mind I saw
20 one or two pages in the report and the rest of the report, which
21 I believe a fair reading indicates is not germane to the issues
22 that the Board said they wanted to hear about.

23 In any event --

24 JUDGE BECHHOEFER: I don't care if you want to call
25 out some of the matters that are not related to anything. There

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1 are a number of items in there. I think we will do it by
2 limited questioning rather -- I think it is easier for you to
3 put the whole report in without disassembling it. It is up
4 to you.

5 MR. HASSELL: Okay.

6 JUDGE BECHHOEFER: There is a conclusory section.
7 I think it is easier to put the whole report in. When the
8 questions are asked, we will make clear the portions we are
9 interested in.

10 MS. STAMIRIS: I think it might be helpful if you
11 would review what the Board's limitations, if any, will put
12 on the SALP report if they are different than my understanding.
13 I was not able to be a party to two of the conference calls.
14 I mentioned these were set out during one of those calls.
15 It is my understanding that I am not to go over the details of
16 specific events which we have already heard testimony about
17 that are covered in that SALP period. Is that the limitation
18 that you had in mind?

19 JUDGE BECHHOEFER: We also said, given the time and
20 all that, that we would limit it to soils matters. There are
21 several other areas that we really have not gotten into too
22 much and do not have too much to do with the soils area as such,
23 the soils area where they were weighted Group 3. These are
24 the limitations.

25 MS. STAMIRIS: I understand.

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1 JUDGE BECHHOEFER: Off the record.

2 (Discussion off the record)

3 JUDGE BECHHOEFER: Is there anything further
4 before Mr. Gadler makes his statement?

5 MR. MILLER: No, sir.

6 JUDGE BECHHOEFER: Off the record.

7 (Discussion off the record)

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END 16

1 JUDGE BECHHOEFER: Back on the record.

2 Colonel Gadler.

3 LIMITED APPEARANCE STATEMENT OF STEVE GADLER

4 MR. GADLER: I preface my remarks with a statement
5 that -- I have some questions to ask. I want to make this
6 statement as stockholder in Dow Chemical Company.

7 We are happy at the action of Dow's terminating
8 the contract with Consumers Power Company.

9 As stockholders, we fought that contract from day
10 one. And so we are very happy that that has happened. And
11 the reason for it is because we were always afraid that Dow
12 would be damaged and its products would be damaged with
13 radioactive steam.

14 These questions that I have are unanswered letters
15 that we have written -- Mapleton Intervenors have written to
16 NRC. We have sent letters to them concerning the dewatering
17 wells at the plant, the number, the sizes of the wells, sizes
18 of the pumps, the power for each of the -- amount of water
19 that is to be pumped with the dewatering process. We have
20 no answer to that.

21 We have sent them letters concerning the electro-
22 magnetic pulse, the hardening of the plant, requests for
23 public hearing -- no answer to that.

24 We have sent letters concerning the damage to the
25 Tittabawasee River from the discharge of radioactive material

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1 into the river -- no answer to that.

2 We have sent letters concerning this country's
3 treaty with Canada concerning the discharge of radioactive
4 materials into the border waters. We have not received any
5 answer to that.

6 And as Mapleton Intervenors, we have checked, too,
7 the NRC giving variances on safety items affecting the public
8 health and safety and several documents where they mentioned
9 the fact that there are variances to be given.

10 And I hope that the Board itself will look askance
11 at one variance, which is literally approval of violation of
12 the law.

13 Mr. Chairman, that is all I have to say. But I
14 do hope that NRC will take my statement and get some answers
15 to our letters.

16 Thank you very much.

17 (Board conferring.)

18 JUDGE BECHHOEFER: The Staff has obviously heard
19 your complaint about the letters. I am not sure what has
20 happened to some of them.

21 I had thought one of the matters was the subject
22 of a rulemaking now -- the EMP matter.

23 MR. HASSELL: It is not clear who they sent the
24 letters to. To the extent they sent them to NRC, I can check
25 with the Office of Public Affairs, et cetera. Beyond that, it

1 is a limited appearance statement. I don't have much to say
2 about it. I guess I will review the transcript to see to
3 what extent I can follow through on letters that have been,
4 in fact, sent to NRC.

5 JUDGE BECHHOEFER: I think Mr. Payton can probably
6 help you.

7 MR. HASSELL: I can check.

8 JUDGE BECHHOEFER: I guess we will be adjourned
9 for the day -- back at 9:00 o'clock tomorrow.

10 (Whereupon, at 5:00 p.m., the hearing was
11 adjourned, to reconvene at 9:00 a.m., Wednesday,
12 June 21, 1983.)

id t.17

CERTIFICATE OF PROCEEDINGS

This is to certify that the attached proceedings before the
NRC COMMISSION

In the matter of: Consumers Power Company (Midland Plant,
Units 1 and 2)

Date of Proceeding: September 20, 1983

Place of Proceeding: Midland, Michigan

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

Barbara Whitlock

Official Reporter - Typed

Barbara Whitlock

Official Reporter - Signature