

ORIGINAL

UNITED STATES
NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF:

METROPOLITAN EDISON COMPANY,
et al.

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

DOCKET NO: 50-289 OLA

(Steam Generator
Plugging Criteria)

LOCATION: HARRISBURG, PENNSYLVANIA

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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. 50-289-OLA-1
THREE MILE ISLAND : : 50-289-OLA-2
NUCLEAR STATION, UNIT NO. 1 : (Steam Generator Plugging
(GPU NUCLEAR, ET AL. : Criteria)
----- X

Department of Education
Harristown Building No. 2
Heritage Room B
333 Market Street
Harrisburg, Pennsylvania 17126

Thursday, March 27, 1986

The special prehearing conference in the above-entitled matter convened, pursuant to notice, at 9:00 o'clock a.m.

BEFORE:

SHELDON J. WOLFE, Chairman
Atomic Safety and Licensing Board
Nuclear Regulatory Commission
Washington, D.C. 20555

FREDERICK J. SHON, Member
Atomic Safety and Licensing Board
Nuclear Regulatory Commission
Washington, D.C. 20555

OSCAR H. PARIS, Member
Atomic Safety and Licensing Board
Nuclear Regulatory Commission
Washington, D.C. 20555

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APPEARANCES:

On Behalf of the Applicant:

BRUCE W. CHURCHILL, ESQ.
WILBERT WASHINGTON, II, ESQ.
ALAN D. WASSERMAN, ESQ.
Shaw, Pittman, Potts & Trowbridge
1800 M Street, N.W.
Washington, D.C. 20036

On Behalf of the TMIA:

JOANNE DOROSHOW, ESQ.
Three Mile Island Alert
315 Peffer Street
Harrisburg, Pennsylvania 17102

On Behalf of the Commonwealth:

THOMAS Y. AU, ESQ.
Commonwealth of Pennsylvania
101 South Second Street
Harrisburg, Pennsylvania 17120

On Behalf of the NRC:

MARY E. WAGNER, ESQ.
MITZI A. YOUNG, ESQ.
Office of the Executive Legal Counsel
Nuclear Regulatory Commission
Washington, D.C. 20555

* * * * *

P R O C E E D I N G S

JUDGE WOLFE: Good morning.

This is the special prehearing conference in the case of GPU Nuclear Company et al., Three Mile Island Station, Unit 1, Docket Nos. 50-289-OLA-1 and OLA-2, and is being held pursuant to this Atomic Safety and Licensing Board's memorandum and order and pursuant to the Board's notice of hearing on issuance of amendment to the facility operating license. These two Board issuances are dated February 12, 1986.

At issue in the licensee's application to amend is the steam generator tube technical specs. This proposed amendment, TSCR-148, would amend these technical specifications. It would maintain the 40 percent throughwall limit on the secondary side of the tubes, but would replace the 40 percent limit on the primary side of the tubes with a sliding scale which goes from 40 percent to 70 percent throughwall, depending upon the size of the defect.

The licensee applied for this amendment on November 6th, 1985, and the Commission published a notice of opportunity for prior hearing on January 6th, 1986.

The my left is Administrative Judge Frederick Shon, the nuclear engineer member of this Board.

To my right is Administrative Judge Oscar Paris,

1 the environmental scientist member of this Board.

2 I am Sheldon Wolfe, Administrative Judge legal
3 member and Chairman of the Board.

4 Beginning to my left will counsel and/or
5 representatives please identify themselves.

6 MS. WAGNER: My name is Mary Wagner and I am
7 representing the NRC staff. With me today is co-counsel
8 Mitzi Young.

9 MR. CHURCHILL: Good morning. I am Bruce W.
10 Churchill with the law firm of Shaw, Pittman, Potts &
11 Trowbridge in Washington, D.C. I am representing the
12 licensee today. On my immediate right is Wilbert
13 Washington, II, also of the same law firm, and on left is
14 Alan D. Wasserman also of Shaw, Pittman.

15 MS. DOROSHOW: My name is Joanne Doroshow. I
16 represent TMI Alert in this proceeding.

17 JUDGE WOLFE: All right. We will get to you
18 later, Mr. Au.

19 The State of Pennsylvania on March 25 moved to
20 participate as an interested State pursuant to 10 CFR
21 2.715(c).

22 Mr. Au, your full name again is, please?

23 MR. AU: My name is Thomas Y. Au. I am counsel
24 for the Commonwealth of Pennsylvania.

25 JUDGE WOLFE: Mr. Au, to what extent is the

1 State of Pennsylvania going to participate?

2 MR. AU: The Commonwealth of Pennsylvania is not
3 filing contentions in this matter. We will take the
4 contentions as they stand for purposes of this hearing.
5 We wish to participate to contribute to the full
6 development of the record in this case.

7 JUDGE WOLFE: That would be via cross-
8 examination of witnesses.

9 MR. AU: Cross-examination, yes.

10 JUDGE WOLFE: Then do you plan to file proposed
11 findings of fact and exceptions; is that correct?

12 MR. AU: We may file proposed findings of facts
13 and exceptions, depending on how the record is developed.

14 JUDGE WOLFE: I notice your motion for leave to
15 participate only speaks to or is directed to the case OLA-
16 1. Do you know the distinction between now cases OLA-1
17 and OLA-2?

18 MR. AU: No, I wasn't aware of the distinction.

19 JUDGE WOLFE: I see.

20 MR. AU: Was there a consolidation of the two?

21 JUDGE WOLFE: There has not been as yet, no.

22 Well, we will proceed.

23 Is there any objection to the State of
24 Pennsylvania's motion for leave to participate?

25 Ms. Wagner?

1 MS. WAGNER: The staff has no objection.

2 MR. CHURCHILL: No. objection.

3 MS. DORCSHOW: No objection.

4 JUDGE WOLFE: All right. The Board grants the
5 State of Pennsylvania's motion to participate in Case No.
6 OLA-1. We are going to discuss Case OLA-2 at the right
7 moment. Mr. Au, you might orally move for leave to
8 participate in that case.

9 The Board would initially note that pursuant to
10 our memorandum and order of February 12, 1986 that TMIA on
11 February 24th submitted an appropriate affidavit of one of
12 its members, a Miss Pickering, setting forth her name and
13 address which established the necessary proximity to the
14 nuclear facility, TMI-1, and also specified her
15 authorization for the filing of the petition for leave to
16 intervene by TMIA, and accordingly we grant TMIA's
17 petition for leave to intervene.

18 TMIA submitted five contentions on March 10.
19 The staff responded on March 20, and the licensee
20 responded on March 20.

21 Second, we would note for the record that in a
22 conference telephone call on March 21 to Ms. Wagner, Ms.
23 Doroshow and to Mr. Wasserman the Board said that they
24 should prepare to discuss a companion case which now bears
25 the same docket number as OLA-1, but is now identified as

1 OLA-2.

2 In that case, which is docketed now as OLA-2,
3 the licensee on February 4, 1986 applied for an amendment
4 to the steam generator tube specification. That proposed
5 amendment, TSCR-153, would in substance change the repair
6 criteria to allow the licensee not to repair tubes under
7 certain circumstances, if a tube has a defect up to 50
8 percent tube wall penetration.

9 In the Federal Register on February 28, 1986 the
10 Commission published a notice of opportunity for hearing,
11 but to date and as far as I know, and perhaps you can help
12 the Board out, Ms. Wagner, to date the Commission has not
13 made a final determination as to whether or not there is a
14 significant hazards consideration.

15 MS. WAGNER: That is correct, Judge Wolfe. The
16 30-day period for comment on the notice has not expired,
17 and any determination that the staff would make would
18 occur after that. I believe it expires March 30th.

19 JUDGE WOLFE: I noticed in your statement there,
20 as well as in your submissions to the Board, you speak not
21 of the Commission determination, but of the staff's
22 determination. Would you clarify that as to whether or
23 not there is a hazards consideration?

24 MS. WAGNER: The staff makes the proposed
25 determination. If there is an intervention petition, I

1 believe the staff then goes on to make a final
2 determination which becomes the Commission's
3 determination.

4 JUDGE WOLFE: I see. All right.

5 This notice by the Commission stated that any
6 petition for leave to intervene had to be filed by March
7 31. On March 10 TMIA filed with this Board a motion to
8 broaden the hearing scope requesting that the two cases be
9 consolidated, that is, Cases OLA-1 now and OLA-2, that
10 these two cases be consolidated and heard in this
11 proceeding and attached to this motion a request for a
12 hearing, which also set forth as its proposed contentions
13 substantially the identical five contentions proposed with
14 respect to TSCR 148 and incorporated by reference the
15 aspects set forth in the TSCR 148 case. It also submitted
16 an appropriate affidavit of one of its members again, Ms.
17 Pickering.

18 In its answer of March 20 the licensee
19 provisionally supported TMIA's motion, which is in
20 substance a motion to consolidate the two cases.

21 In its response to TMIA's request for hearing,
22 the licensee did not, and Mr. Wasserman confirmed in the
23 March 21 conference call that it did not challenge TMIA's
24 standing/interest and did not state that TMIA failed to
25 meet the "aspects" requirement of 2.714(a) of our

1 regulations and rules of practice.

2 However, the licensee did oppose the
3 admissibility of the contentions proposed by TMIA with
4 respect to TSCR 153.

5 Further, Ms. Wager, advised in this conference
6 call that the staff would file a submission advising that
7 it neither questions TMIA's standing/interest nor contends
8 that TMIA has not met the aspects requirement of Section
9 2.714(a) in this case.

10 Ms. Wagner agreed in the conference call to
11 telephone Ms. Doroshow and Mr. Wasserman on Monday, March
12 24th to advise with respect to TSCR 153 whether the staff
13 replied upon its response of March 20 to the substantially
14 identical contentions in TSCR 148.

15 Ms. Wagner also agreed that if the staff's
16 response with respect to the proposed contentions in TSCR
17 153 varied from its earlier response to the proposed
18 contentions in TSCR 148, she would telephone Ms. Doroshow
19 and Mr. Wasserman on Monday March 24th to advise them as
20 to the substance of any such variances and would see to it
21 that Ms. Doroshow would have in hand the staff's written
22 response on March 26th. Ms. Doroshow agreed to this
23 procedure.

24 Have I accurately summarized the substance of
25 the March 21 telephone conference call?

1 MS. WAGNER: I believe so, Judge Wolfe.

2 MR. CHURCHILL: Mr. Wasserman?

3 MR. WASSERMAN: Yes, Judge Wolfe.

4 MR. CHURCHILL: Ms. Doroshow?

5 MS. DOROSHOW: Yes.

6 MR. CHURCHILL: All right.

7 Ms. Wagner, did you telephone Ms. Doroshow and
8 Mr. Wasserman on March 24th?

9 MS. WAGNER: Yes, I did.

10 MR. CHURCHILL: In summary fashion could you
11 tell us what you so advised them?

12 MS. WAGNER: Certainly. I advised them each
13 that the position the staff would be taking in response to
14 the contentions filed in OLA-2 would be identical to the
15 positions we took in response to the same contentions
16 which were also filed in OLA-1.

17 On March 25th I did file and express mail to Ms.
18 Doroshow a copy of our response to those contentions, and
19 I hand served it on the Board as well that day.

20 JUDGE WOLFE: Yes.

21 Ms. Doroshow, you did receive the staff's
22 submissions yesterday I take it?

23 MS. DOROSHOW: Yes, I did.

24 JUDGE WOLFE: All right. And, indeed, on March
25 the staff did file its response to TMIA's formal demand

1 for adjudicatory hearing in the TSCR 153 case now known as
2 OLA-2 wherein the staff stated that TMIA had satisfied
3 both the standings/interest requirement and the aspects
4 requirement of Section 2.714(a).

5 In light of the appropriate affidavit by one of
6 the TMIA members, Ms. Pickering, dated March 6th, 1986,
7 and in light of the subject matter in this TSCR 153 case
8 as to which TMIA wishes to intervene, which were
9 incorporated by reference from the formal demand for
10 adjudicatory hearing in the OLA-1 case, the Board grants
11 TMIA's petition for leave to intervene in the TSCR 153 or
12 OLA-2 case.

13 The Board also conditionally grants TMIA's
14 request for a hearing in that case. Whether a hearing
15 will be held in the OLA-2 case will depend upon whether at
16 least one of TMIA's contentions is admitted as an issue in
17 controversy.

18 On March 25 the staff also filed its response to
19 TMIA's motion to broaden the hearing scope.

20 I think at this time, Mr. Au, you may make your
21 motion for leave to participate in the OLA-2 case, namely,
22 the amendment TSCR 153.

23 MR. AU: I was aware of the amendment on TSCR
24 153. I would like to make an oral motion for leave to
25 participate as an interested State in OLA-2 on the same

1 basis as we have made that motion for OLA-1.

2 JUDGE WOLFE: I take it there are no objections?

3 MS. WAGNER: The staff has no objections.

4 MR. CHURCHILL: No objections.

5 MS. DOROSHOW: No objections.

6 JUDGE WOLFE: The State's motion is granted.

7 Now in order to expedite the resolution of these
8 two cases, we will hear arguments on the five
9 substantially identical contentions in the two cases.
10 After hearing oral argument, the Board will recess and
11 determine which, if any, of the contentions are admissible
12 and decide actually whether the two cases should be
13 consolidated.

14 I would advise the parties that during recess we
15 will make this determination. We are doing that to
16 expedite the resolution of the case. We will advise the
17 parties which, if any, of the contentions are admitted and
18 thereafter issue an order giving our reasons why we have
19 admitted certain contentions or why we have rejected
20 certain contentions.

21 Of course, we are aware of the possibility that
22 other petitions for leave to intervene may be filed by
23 March 31 in Case No. OLA-2 and would have to be
24 considered.

25 Now before we begin this oral argument, the

1 Board has a couple of questions to put to Ms. Doroshow.

2 Would you look at TMIA's formal demand for
3 hearing of March 10, Ms. Doroshow. That is with respect
4 to OLA-2, the 153 amendment. Look at proposed Contention
5 2.

6 Do you have that?

7 MS. DOROSHOW: Yes, I have Contention 2.

8 JUDGE WOLFE: Now the last two words of that
9 contention are the words "is uncertain."

10 MS. DOROSHOW: I believe that that was a
11 typographical error.

12 JUDGE WOLFE: I see. It doesn't appear in your
13 Contention 2 submitted also on March 10 with respect to
14 OLA-1.

15 MS. DOROSHOW: Right.

16 JUDGE WOLFE: So do you want to strike the words
17 "is uncertain"?

18 MS. DOROSHOW: That is correct.

19 JUDGE WOLFE: Now, secondly, Ms. Doroshow, in
20 your March 10th submission with respect to Case OLA-1,
21 your proposed contention 5 contains the words "contain an
22 operational and degradation allowance to." Is that to be
23 added or deleted?

24 MS. DOROSHOW: To be deleted.

25 JUDGE WOLFE: To be deleted, right.

1 JUDGE SHON: Ms. Doroshow, back tracking just a
2 bit on Contention 2 in your March 10th submission, the
3 line above the one in which we deleted the words "is
4 uncertain," there is a word "in." It says "The testing
5 technique relied upon to define derated tubes in
6 inaccurate and inconclusive." I believe the word should
7 be "is."

8 MS. DOROSHOW: That is correct, it is should be
9 "is."

10 MR. CHURCHILL: Excuse me, Your Honor. On
11 Contention 5, I am not sure I understand how that is now
12 worded.

13 JUDGE WOLFE: The Contention 5 submitted on
14 March 10 with respect to OLA-1, do you have that
15 submission, Mr. Churchill, of TMIA?

16 MR. CHURCHILL: Yes, I have that.

17 JUDGE WOLFE: You will notice that it contains
18 the words "contain an operational and degradation
19 allowance to." Do you see those words?

20 MR. CHURCHILL: Yes, sir.

21 JUDGE WOLFE: Mr. Doroshow has advised that
22 those words should be stricken.

23 MR. CHURCHILL: We are deleting more than one
24 word?

25 JUDGE WOLFE: Oh, yes. The words to be deleted

1 are "contain an operational and degradation allowance to."

2 MR. CHURCHILL: Thank you. Now I understand.

3 JUDGE WOLFE: All right. We will now begin to
4 hear the oral argument on the admissibility of the
5 contentions. We have the staff's submissions or
6 responses and answers and the licensee's responses and
7 answers.

8 You can now proceed, Ms. Doroshow, to give your
9 oral response. I don't know, since the contentions now in
10 both cases are identical, that this presents any sort of
11 problem to the parties in addressing their arguments. If
12 so, please advise us and we will make the necessary
13 adjustments or rulings.

14 All right.

15 MS. DOROSHOW: Well, TMIA intends to approach
16 these contentions as pertaining to both OLA-1 and OLA-2.
17 Our position is that the issues are the same in both
18 proceedings and that the basis for the contentions, which
19 are identical as proposed, are the same for both
20 proceedings.

21 TMIA's Contention 1 concerns the fact that it
22 has not been demonstrated that the form and the rate of
23 new tube degradation has been adequately determined.

24 The staff in transcripts of meetings with GPU
25 has expressed the position that any new plugging criteria

1 at TMI-1 just be judged against both the eddy current
2 testing technique uncertainties as well as the knowledge
3 of the form and the rate of new tube degradation.

4 The testing which GPU relies on to establish
5 that the new tube defects, which were detected in 1984,
6 that these new tube defects are not new indications or the
7 result of new crack growth we believe is inconclusive.

8 We think the evidence that established that the
9 1984 indications are not the result of new crack growth is
10 unreasonable in light of several factors, one being the
11 variations in this throughwall depth and the
12 circumferential length of the indications themselves as
13 evidenced by the eddy current testing which was done in
14 1984.

15 GPU has also determined that typical tubes have
16 IGA patches, intergranular attack patches, but cannot
17 conclude that these patches are definitely the result of
18 the initial tube failure analysis. They can only
19 speculate as to that fact.

20 They do so on the basis of comparing the eddy
21 current data in 1984 to eddy current data which was
22 gathered in 1981 and 1982 during the initial failure of
23 the tubes, and they state that the '84 indications reveal
24 that by knowing the specific location of the new
25 indications that most of them can be found in the 1982

1 tapes. but not all of these indications can be found.

2 In addition, the data itself does not
3 substantiate the conclusion that growth could not be
4 occurring because of the variations in the data.

5 In addition, GPU's consultants, which did an
6 analysis of the recent indications, B&W in particular
7 refused to conclude that new corrosion may not have
8 occurred.

9 The staff and the company have noted on the
10 record during meetings that there is insufficient
11 information to conclude also that all the pits due to
12 grain dropout have been detected which, according to one
13 staff person, Mr. Johnston, "makes it difficult to just
14 buy a set of curves and say okay."

15 There have been no tubes pulled from TMI-1 since
16 the new indication occurred, and since tubes were last
17 pulled from TMI-1, the tubes have been subjected to
18 thermal and hydraulic loading, there have been new flow
19 patterns from the last round of extensive tube plugging
20 and, in addition, it is now well recognized that
21 radioactive deposits have built up on the outer diameter
22 of the steam generator tubes. That was reported in recent
23 inspection reports by the NRC.

24 The company has not yet analyzed the effect of
25 these deposits on the steam tubes or have yet been able to

1 predict the behavior of these deposits which seem to be
2 moving around in the steam generators.

3 GPU also relies on long-term corrosion tests to
4 demonstrate that violations in chemistry conditions could
5 not have caused new cracking, but the long-term corrosion
6 tests which found scattered IGA and shallow cracking were
7 not size metallographically.

8 The staff has noted on the record in transcripts
9 of meetings between the staff and GPU that there are
10 questions which have not been resolved concerning the
11 claim that degradation is not proceeding farther or that
12 grain dropout has stopped or is likely to continue. And
13 until actual testing is done, the staff is at least,
14 according to these transcripts, taking the position that
15 OLA-1 is deficient, to be what they say missing a piece, a
16 substantial piece in terms of the application for this
17 license amendment.

18 There also appears to be significant
19 disagreement among the staff's technical experts as to
20 whether OLA-2 is also missing a piece.

21 Finally, in addressing the argument that it has
22 already been established by this Board and by the Appeal
23 Board that new corrosion is not proceeding or causing new
24 cracks, the Appeal Board in its decision on TMIA's appeal
25 of the first steam generator tube Licensing Board decision

1 was judging TMIA's motion to open the record, which at
2 that time concerned the fact that there were new cracks
3 and there was potentially new growth or new indications.
4 They ruled that there was not sufficient evidence at that
5 time to reopen the record, but the evidence was not
6 litigated.

7 The new evidence which has come to light as a
8 result of the 1984 indications has not been litigated by a
9 Board. It is ---

10 JUDGE WOLFE: Excuse me. What you are saying
11 now is that that which was presented to the Appeal Board
12 is not now the subject of your contention?

13 MS. DOROSHOW: There were arguments made in
14 TMIA's motion to reopen the record before the Appeal Board
15 which were similar to some of the issues which are now
16 before this Board. However ---

17 JUDGE WOLFE: You have additional evidence
18 beyond that which you put before the Appeal Board and
19 additional evidence that has occurred since late 1984; is
20 that correct?

21 MS. DOROSHOW: There is additional evidence in
22 terms of the experience of the plant since that time. In
23 addition, the company has put forth new technical reports
24 dealing with this issue which have not been the subject of
25 any Board's ruling.

1 The other point is that the Appeal Board in
2 considering TMIA's motion to reopen the record was judging
3 whether to reopen that proceeding on the basis of
4 stringent record reopening standards which I don't believe
5 can be used as collateral estoppel in terms of bringing
6 these issues before this Board which are necessary to
7 resolve a license amendment request. In fact, they are
8 the substantial basis for the license amendment request,
9 which the company has put forward.

10 JUDGE SHON: Ms. Doroshow, I take it that this
11 new evidence to which you allude, reports, operating
12 experience and so on, all weighs in the direction of an
13 indication of continuing degradation of some sort rather
14 than that the degradation is terminated; is that right?

15 MS. DOROSHOW: In terms that the company's
16 technical reports are still not adequate to resolve the
17 issue and there are still open questions, and so to that
18 extent, yes, it does favor the position that these issues
19 have not been resolved adequately, and I think the staff
20 has pretty clearly stated that on the record during
21 meetings between the company and the staff.

22 They do not feel that until at least an actual
23 tube is pulled from the TMI-1 steam generators so that
24 their predictions as to crack growth and their predictions
25 concerning any eddy current capability can be measured

1 against an actual tube destructive testing, that they do
2 not believe these issues have been resolved.

3 It seems that the staff is taking that position
4 at least with regard to OLA-1, and we have detected that
5 there is disagreement among staff members as to whether
6 that is also necessary for OLA-2 in just reviewing the
7 transcripts of these meetings.

8 But, in addition, there have been operating
9 conditions since the 1984 indications. The plant has
10 restarted and there is this buildup of radioactive
11 deposits which, and I am not a technical expert, but it
12 seems to me that there could be some stress placed on the
13 tubes by this buildup and that has not been analyzed
14 properly.

15 (Board conferring.)

16 JUDGE SHON: You did say these radioactive
17 materials were accumulating on the secondary side?

18 MS. DOROSHOW: That is correct, yes.

19 JUDGE SHON: Thank you.

20 JUDGE WOLFE: Had you completed now?

21 MS. DOROSHOW: Yes.

22 JUDGE WOLFE: Mr. Churchill.

23 MR. CHURCHILL: Mr. Chairman, I first would like
24 to object to the procedure that TMIA is following here.
25 The rules, and indeed this Board's order said that prior

1 to this prehearing conference TMIA was required to submit
2 their contentions along with the basis with reasonable
3 specificity. That was supposed to have been submitted two
4 weeks ago, or on March 10th.

5 The contentions that we got had no basis with
6 them. It was just in all cases a flat statement in the
7 form of an opinion and in many cases without any
8 explanation for us to even know what the contention was.

9 Now at the prehearing conference Ms. Doroshow
10 has come forward with a long list of what she now says are
11 the basis for the contentions. We have never heard that
12 before. We did not get that out of either the petition
13 for leave to intervene in OLA-2 or in the contention
14 statement that was supposed to have been filed for OLA-1.
15 It just wasn't there.

16 We are now in the position of responding to that
17 for the very first time as we hear it orally. 2.714(b)
18 states that that basis ---

19 JUDGE WOLFE: Nevertheless, Mr. Churchill, you
20 did make the argument of collateral estoppel. If
21 collateral estoppel obtains, you must have understood the
22 gist of what the contention was about or else you wouldn't
23 have raised the point, however valid.

24 MR. CHURCHILL: Oh, the contention is that the
25 form and rate of new tube degradation hasn't been

1 determined. From that I can see that the issue that was
2 raised, the basis now for that contention, and I can make
3 the argument of collateral estoppel on that. Now the
4 basis for them saying that is a different question.
5 Collateral estoppel is really not part of the basis
6 argument. Either one of those two alone would keep the
7 hearing out, either collateral estoppel or the fact that
8 they haven't submitted a basis. You don't have to find
9 both.

10 And, indeed, the very issue of what was the
11 cause of the corrosion and what was the form of the
12 corrosion and whether or not it was still continuing was
13 litigated extensively. There was a determination by this
14 Board in that kinetic expansion repair hearing that the
15 corrosion cause and form had been identified and that it
16 wasn't going ahead. This was in the summary disposition
17 process.

18 TMIA specifically appealed the summary
19 disposition of that contention to the Appeal Board. The
20 Appeal Board reviewed the record and affirmed specifically
21 the Licensing Board's findings that indeed the corrosion
22 had been identified, the conditions that caused it had
23 been arrested and the corrosion had indeed stopped.

24 In addition to the appeal, the Appeal Board
25 considered simultaneously a motion to reopen the record in

1 which TMIA advanced two more pieces of information. One
2 was the build-up of certain concentrations in the primary,
3 a temporary peak in the concentrations, and the other was
4 the results of the 1984 eddy current tests which Mr.
5 Doroshow alluded to right now.

6 The Appeal Board read those documents. The
7 Appeal Board read all the reports and the Appeal Board
8 gave TMIA opportunity for oral argument. The Appeal Board
9 concluded that there was no basis there at all to upset
10 the conclusion, based on the new information, the
11 conclusion of the Licensing Board that in fact the
12 corrosion had stopped and that there were no conditions
13 which could reinitiate the corrosion. And they did
14 examine all that information in great detail.

15 So as far as the contention on its face that the
16 form and rate of degradation has not been determined, it
17 has been determined, and it has been litigated and there
18 has been a final judgment, and by law they are
19 collaterally estopped from raising it.

20 Now Ms. Doroshow was suggesting that there has
21 been information since the Appeal Board made its
22 determination that would bear on this. I submit, Your
23 Honor, that there is no new information that would in any
24 way suggest that the Appeal Board was wrong. The company
25 always continues to look at these things and always will

1 continue to do it.

2 The company in fact, and she is right, a couple
3 of the TDR's have been updated with more recent analysis
4 based on more recent experience which just further
5 confirms it. There is no evidence, there is no
6 information and there is no indication whatsoever that
7 would even suggest that that conclusion should be in any
8 way qualified or undermined.

9 JUDGE WOLFE: Well, Ms. Doroshow does point to
10 some new evidence, and I don't want to get into the merits
11 of this at all, but does point to some evidence in the
12 form of I guess TDR's, Ms. Doroshow, or what reports are
13 you speaking of?

14 MS. DOROSHOW: I was speaking of the technical
15 documents which the company has since produced since the
16 Appeal Board.

17 JUDGE WOLFE: Yes. She not only speaks to
18 those, and you have addressed that, but she also spoke to
19 the fact that there have been meetings between the staff
20 and the licensee, which may or may not have been attended
21 by Ms. Doroshow, wherein she has argued that the
22 transcripts of these meetings show that the staff had, if
23 not concern, at least it didn't agree entirely with the
24 licensee's position.

25 (Board conferring.)

1 These transcripts indicated the staff's at least
2 doubts on the licensee's position.

3 But, in any event, go ahead with your argument.
4 I am sorry, Mr. Churchill.

5 MR. CHURCHILL: All right. That was my argument
6 on the collateral estoppel which I just did take out of
7 order.

8 JUDGE WOLFE: While we are on that point, I just
9 want to get into this, and of course you can make any
10 argument you want and I am loath to cut off argument at
11 least during the consideration of contentions, but the
12 Board's conclusion is, and we have looked up the law on
13 this and certainly it was well stated by another Licensing
14 Board many years back. It was Duke Power Company, LBP-74-
15 73-8AEC-664,665, 1974.

16 That Board indicated, and we agree, that at most
17 a defense of collateral estoppel or for that matter res
18 judicata are really affirmative defenses, and this is
19 pointed out in the Federal Rule of Civil Procedure 8C,
20 that a party's responsive answer or responsive pleading
21 should set forth affirmative defenses such as res judicata
22 or collateral estoppel, fraud, duress, cordon
23 satisfaction, et cetera.

24 Case law has indicated over the years that while
25 responsive pleadings should set forth, for example,

1 collateral estoppel as a defense, because there are
2 factual disputes within that or presented by that defense
3 that a motion for summary judgment in the Federal Courts
4 or in our case it would be a motion for summary
5 disposition would be the way to go at this rather than to
6 reject a contention on the basis of collateral estoppel.

7 Actually we are here to consider contentions and
8 whether they fall within the standards of 2.714(a),
9 namely, have bases been set with reasonable specificity in
10 order to admit the contention.

11 But proceed.

12 MR. CHURCHILL: In that vein, Your Honor, while
13 you are considering the collateral estoppel aspect, the
14 Seabook Case, Public Service Company of New Hampshire, LBP-
15 82-76 16-NRC-1029, 1044 through 1045, 1982, and the Perry
16 Case, LBP-81-24 14-NRC-175, 1981 I believe are both
17 examples of collateral estoppel being used at the
18 prehearing stage to eliminate the admission of the
19 contention in the first instance.

20 JUDGE WOLFE: Didn't you cite one of those cases
21 in one of your briefs, Mr. Churchill, and, if so, would
22 you identify that?

23 MR. CHURCHILL: I believe we cited the Perry
24 Case.

25 JUDGE WOLFE: Could you give me the caption of

1 that submission, please?

2 MR. CHURCHILL: Yes, sir. The Perry Case was
3 cited on page 9.

4 JUDGE WOLFE: Of what document?

5 MR. CHURCHILL: Of the document response to --
6 it is our March 20 document in the response to the
7 supplement of the petition. It is not so captioned, but
8 this would be the OLA-1. It is the response to the
9 supplement to the petition on change request 148. That
10 same case is cited on page 15.

11 (Board conferring.)

12 JUDGE WOLFE: And your point is in citing those
13 two cases, certainly the Perry Case and in those cases at
14 the Licensing Board level ---

15 MR. CHURCHILL: Yes sir.

16 JUDGE WOLFE: --- and at the prehearing
17 conference?

18 MR. CHURCHILL: Yes.

19 JUDGE WOLFE: Well, there is a conflict between
20 Licensing Boards. So I guess there will ultimately have
21 to be a decision by some higher administrative
22 adjudicatory body.

23 (Board conferring.)

24 JUDGE WOLFE: All right, proceed.

25 MR. CHURCHILL: Your Honor, on the question of

1 basis itself, there is the allegation that the form and
2 rate of new tube degradation has not been determined. No
3 basis at all was given in the submittals.

4 That is a little bit baffling to us. We do have
5 the right to prepare for these arguments because all of
6 the information we know, and indeed we have all of the
7 information that there is on this issue, says just the
8 contrary.

9 It seems to me if they are going to come in with
10 a basis they have got to point to something that suggests
11 there is a basis for the underlying allegation that there
12 in fact is new tube degradation going on, let alone what
13 the form and rate of it is. We have been pointed to no
14 specific document and no specific piece of information
15 that would suggest otherwise.

16 TMIA has this morning given a list of reasons,
17 but there was not a single citation to any piece of
18 evidence, to any piece of data or to any piece of
19 information that we can talk to.

20 She mentioned vaguely something about variations
21 in depth and length of indications, but I don't know what
22 document she is talking about or what information there is
23 that would set forth variations that would lead to the
24 conclusion or undermine the previous conclusion that there
25 is no continuing tube degradation.

1 All the evidence in everything that has been
2 litigated or presented before any Board or before the
3 Commission suggests that it has stopped. In fact, what
4 was litigated before and what there can be no question
5 about, and I am not arguing collateral estoppel, I am
6 pointing out that the staff and indeed the Boards, too,
7 have made the determination that we know the cause of this
8 unusual inner-diameter corrosion. We know what caused it
9 and we stopped that cause. Steps are in place so that it
10 won't reoccur and there is no corrosive environment.

11 The first line of defense for us is that there
12 no way it could be occurring. Okay, so there is no way it
13 could be occurring, but then we go further and we look and
14 we make tests and we check to see if it is, and all
15 indications are that it is not, which is consistent with
16 the fact that there is no way that it could be.

17 At this point in the record we certainly should
18 be where we can determine and have it determined that
19 there is no ongoing corrosion on the inner diameter of
20 these tubes, and she has not pointed to any information to
21 suggest that there is.

22 Now she mentioned staff transcripts, and I
23 suppose, I don't know which transcripts exactly she is
24 referring to, but in the past she has referred to a
25 meeting that took place in early 1985 prior to the

1 submittal of even the first amendment request here and
2 prior to the submittal of the TDR's and prior to the oral
3 argument and the decision by the Appeal Board in that
4 case, and by individuals on the staff who were at the
5 disadvantage of not being familiar with that kinetic
6 expansion proceeding and not being familiar with even the
7 form of the mechanism or what had been going on, and in
8 fact not having had the opportunity to even have read the
9 documents that were submitted even at that time, which was
10 before either of these two applications had been
11 submitted.

12 That is not fair to those individuals who may
13 have said that. That is not fair to the staff and it is
14 not fair to the applicants.

15 All of that has been superseded by our
16 applications, the reference to specific documents, the
17 submittal of specific documents and the staff's current
18 position on this as reflected in the Board notifications
19 and so on.

20 There really is nothing to point to, and TMIA
21 has not pointed to anything that would suggest that there
22 is ongoing corrosion. TMIA has just stated this morning --
23 -

24 JUDGE WOLFE: Well, at this point aren't you
25 really indicating then that there is an issue of disputed

1 fact here?

2 MR. CHURCHILL: There is?

3 JUDGE WOLFE: Are you indicating that there is?
4 Ms. Doroshow says that there are reports that show
5 continuing corrosion. The staff has shown doubts in
6 transcripts. You say no, there are no reports and no, if
7 there was concern shown by the staff during the course of
8 transcripts it was because it was too early in the game
9 and they didn't understand thoroughly what was happening.

10 MR. CHURCHILL: Yes, sir.

11 JUDGE WOLFE: Well, now how do you expect us
12 upon an argument of that sort to make a judgment that at
13 this point that contention should be rejected?

14 MR. CHURCHILL: You are right, Your Honor.

15 JUDGE WOLFE: And how can we, even if you don't
16 buy the Rules of Civil Procedure and the case law decided
17 under that or our feeling that collateral estoppel does
18 not enter into the adjudicatory picture at the prehearing
19 conference stage, if that is so, I think you are
20 highlighting that there is an issue of material fact and
21 we can't make a decision, at least insofar as rejection of
22 the contention is concerned.

23 We would most certainly be interested and if you
24 feel strongly enough about it, and I am not indicating one
25 way because I can't speak for the other two technical

1 member here on how they will rule upon your arguments, but
2 to my mind you could proceed on summary disposition if we
3 do admit the contention. Bring it out and make your
4 argument and present your affidavits and we will have
5 something concrete before us rather than just at this
6 juncture argument.

7 I feel very uncomfortable when there are
8 outstanding issues of material fact and people make
9 arguments about it. I want to know what the facts are in
10 support of their argument. I just don't know what the
11 facts are, but I am speaking for myself as Chairman and
12 not for the other two Board members.

13 Go ahead.

14 MR. CHURCHILL: Well, I agree with you in many
15 respects because it is difficult. There is case law that
16 suggests that the Boards are not supposed to consider the
17 facts or to make any resolution of any conflicts or
18 differences of opinion that may exist at this stage. It
19 is often a fine line to walk because it is very hard to
20 consider these contentions without knowing something about
21 what is behind them.

22 And I am not asking you to say whether I am
23 right or Ms. Doroshow is right about these things. What I
24 am asking you to do is to apply 2.714(b) which says she
25 has to identify for us a basis with reasonable specificity

1 for the contention that there is corrosion going forward.
2 That is all I am asking.

3 I am not arguing, and I shouldn't be arguing
4 really whether or not there is or is not corrosion, nor
5 should you be asked to determine right now whether or not
6 there is or is not corrosion, for example. All you are
7 being asked to determine is whether they have provided a
8 basis with reasonable specificity that there is corrosion
9 going on.

10 I know of no evidence or information that
11 suggests there is any ongoing tube degradation, and I
12 don't think any has been identified to us.

13 JUDGE SHON: But yet Ms. Doroshow says that the
14 reports and the transcripts of certain meetings and so on,
15 and it was a little carefully worded, your reply was a
16 little carefully worded. I think she did not say out and
17 out show that there is corrosion still going, but stated
18 it as a negative, failed to show that there is no longer
19 any corrosion going on. These then seem to me would be
20 the basis.

21 It is difficult, as you have pointed out, to
22 decide upon the basis without reaching the merits of the
23 question. The two notions are mutually exclusive. But it
24 seems to me that she has said they have these facts,
25 reports, transcripts and operating experience records, and

1 they show that corrosion can't be excluded.

2 You have said, yes, we have reports, transcripts
3 and operational records, and they continue to show that
4 corrosion can be excluded. As Judge Wolfe pointed out, it
5 seems as if that is the kind of dispute that the
6 adjudicatory process is supposed to settle, isn't it?

7 MR. CHURCHILL: Yes, sir, that is right, it is.
8 I just don't know what reports and information she is
9 referring to, and that I think is her obligation in order
10 to get this issue placed before the Board.

11 JUDGE WOLFE: Well, I will certainly be
12 interested in the staff's position on this matter of bases
13 with requisite specificity.

14 But go ahead, Mr. Churchill. Go ahead with your
15 argument, unless you have completed.

16 MR. CHURCHILL: I thought you were referring to
17 the staff.

18 JUDGE WOLFE: I was. I said that we would be
19 interested in their position on this.

20 MR. CHURCHILL: Not wanting to argue this
21 factually because I don't think it is really appropriate
22 to do it, I don't think I can really say any more about
23 it.

24 I would like to mention briefly about one
25 subject that we dropped in a footnote in our response to

1 this. It is not clear to me because I guess I don't know
2 what kind of tube degradation she is referring to, but it
3 is not clear to me how this relates to the changing of the
4 plugging limit.

5 The plugging criteria is in effect to measure --
6 it determines when you have to plug a tube. That is
7 basically what it does. Whether or not the plugging
8 criteria is 50 percent or 60 percent or 70 percent or 40
9 percent, it really doesn't matter what the form or the
10 rate of degradation is, unless somebody can tell me a
11 little bit about the form and rate that could somehow
12 relate it to a concern about changing the plugging limit
13 from 40 to some other value.

14 It is something that we are all very, very
15 interested in. It is something the staff is interested
16 in. The staff's interest in this is not responded to us
17 by bringing in lawyers to arguing with the staff about
18 nexus or relationship. We provide this information. We
19 are always looking for this information.

20 Due to the vagueness of the contention as worded
21 and the absolute and total lack of basis, we have no way
22 to relate what we think Ms. Doroshow might be referring to
23 the actual application before this Board, which is a
24 change in the criteria for determining when, once the
25 degradation is detected and quantified of any kind,

1 whatever kind it is, whether it has stopped, is going
2 backwards or going forward, there still is the time when
3 you do it and have to determine whether or not you plug
4 the tube.

5 And because of the vagueness of the contention,
6 we are at a loss to know how this relates to either change
7 request 148, which has certain plugging limits, or change
8 request 153, which has a much more conservative plugging
9 limit of 50 percent.

10 JUDGE SHON: Mr. Churchill, this particular
11 point I think will again arise in connection with
12 Contention 5, or it is likely to.

13 It had seemed to me at least personally, and of
14 course I can't speak for the other members of the Board in
15 this case, that in view of the fact that regulatory guide
16 1.121, which is the plugging criteria guide, if I am not
17 mistaken, in view of the fact that that guide requires
18 what is called a degradation allowance, philosophically I
19 think simply on their allowance for continuous degradation
20 of the tubes such that you are sure that before you check
21 it again it won't fail.

22 If you have to plug it now so that it won't fail
23 between testings, so to speak, it has a method for
24 allowing for degradation of the tubes. These things fit
25 into the determination of the plugging criteria and if one

1 of the factors in the equation, so to speak, that
2 determines what the plugging criteria should be is indeed
3 a degradation allowance, then it would seem to me that a
4 nexus is established between degradation allowance and
5 plugging criterion.

6 Is this what you were driving at, Ms. Doroshow?

7 MS. DOROSHOW: Yes. It seems that the basis of
8 any plugging criteria is the ability to know that you can
9 catch a crack before it actually ruptures, and by changing
10 the plugging limit and allowing tubes in service which are
11 more cracked than previously allowed, then there has to be
12 some way to predict or some basis for prediction that
13 these tubes will not rupture between testing.

14 JUDGE SHON: I think that is the common sense
15 explanation and nexus. Whether it is the technical one or
16 not, I don't know. Perhaps the staff will want to address
17 that later.

18 MR. CHURCHILL: We spent a lot of time thinking
19 about that requirement in 1.121 and trying to analyze what
20 we think might have been the reason for it. I am sure it
21 is historical and it goes way back. But with the idea of
22 trying to figure out whether even that particular
23 requirement as it has been raised in 5, how it could
24 possibly have any -- I am sorry, it is not a requirement.
25 It is guidance in the reg. guide -- how that could be

1 related to the particular situation we have here, this
2 kind of inner-diameter corrosion, and did it make any
3 sense.

4 It is hard for us to even make any sense out of
5 that particular one because I suppose you would have to
6 have a certain type of corrosion and maybe a wasting that
7 would generally thin the tube or something, I don't know,
8 if you are talking about how it would affect your fracture
9 mechanical analysis under ASME 3 or 11 or something like
10 that.

11 The point is we couldn't make that connection
12 based on the way this Contention 1 was worded. It just
13 said new tube degradation, and we don't know what they are
14 talking about. There is nothing specific enough there for
15 us to somehow relate that to a reason or the reason for
16 that guidance in 1.121. That is part of our dilemma.

17 I think these are valid points that should be
18 raised, and I hope in the process of raising them the
19 Board begins to appreciate that this is a very difficult
20 contention. Without basis and worded as broadly as this,
21 it is very difficult for us to defend against.

22 So our first line of defense is to show that
23 they haven't satisfied the very minimal basis and
24 specificity requirements in 2.714(b).

25 I think that about concludes my remarks on

1 Contention 1.

2 JUDGE PARIS: Mr. Churchill, I am curious about
3 one point of your argument that degradation has stopped.
4 If degradation of the tubes has stopped, as the Licensing
5 Board found almost two years ago and as you have
6 maintained now, it is not clear to me why GPU needs to
7 change the plugging criteria from 40 percent to 50 percent
8 or 70 percent at this time.

9 Can you tell me why these license amendments are
10 needed if degradation ceased two years ago?

11 MR. CHURCHILL: There can never be absolute
12 assurance of any fact, and that is not the standard that
13 the NRC or the Commission sets down. It is reasonable
14 assurance that something is going to be safe.

15 We have what we consider more than reasonable
16 assurance that degradation has stopped, but even if
17 degradation has not stopped, the whole process here is to
18 make sure that if there is a crack propagating it will be
19 caught.

20 Now when we say degradation has stopped, we know
21 for sure that means that there is not a corrosive
22 atmosphere and there is no more corrosion going on. You
23 are not going to see IGA pitting continuing. That is not
24 really an issue anyway, or it shouldn't be because those
25 are very shallow pits well under the 40 percent. Whether

1 or not you see those very well again is irrelevant to
2 where that plugging limit is, whether it is 50 or above.

3 Where you already have pre-existing cracking,
4 and there is not much because most of the IGSAC, which was
5 the actual cracking in which you actually had separation
6 of the grains so you could see it, and that was all mostly
7 up in the tube sheet, which is outside the range of this
8 amendment request.

9 But there are some cracks in the tubes, and we
10 have a good handle on where they are and how deep they are
11 acceptable.

12 IGSAC, that is the stress assisted cracking, can
13 conceivably, and we don't think it will, but it is
14 conceivable that simply it can propagate deeper into the
15 walls simply by the mechanical and thermal loads having
16 nothing to do with degradation or corrosion.

17 This has been analyzed to show that we don't
18 believe this will happen, and that certainly any
19 detectable crack, that is any that is deep enough to be
20 detected, is well within by a safety margin, which is well
21 within or exceeds the NRC safety margin the area where you
22 know that that crack is not going to do any harm and it is
23 not going to affect the tube's integrity.

24 You would not like to have a crack that possibly
25 propagated a little bit or one that was so tiny

1 volumetrically, even though you had the angle you couldn't
2 quite see it and it if worked itself out to be a little
3 bit bigger, if that crack was beyond 40 percent nominal
4 wall, throughwall, but yet was still so small and still
5 within range that by very detailed analysis, structural
6 analysis you know that the tube integrity is well within
7 the margin of safety and well within the limits of the
8 margin, to plug that tube on this crack that could be
9 discovered later would be a waste. It would add man-rem
10 and it would take away from tubes that are needed for the
11 more efficient running of the steam generator.

12 We never can tell for sure whether we are going
13 to see more cracks at the next eddy current testing or
14 whether we are going to see that some might have gotten
15 deeper from some kind of a stress. What we do know is how
16 deep those cracks are and where they are and that they are
17 okay structurally.

18 Oftentimes you get indications and there have
19 been some before that are just flirting around the 40
20 percent area within the range of eddy current accuracy.
21 Sometimes those cracks that are right in that area and you
22 take into consideration the accuracy, you have to make a
23 conservative call and plug them. Clearly if your limit is
24 a little higher, you are going to not have to then
25 unnecessarily plug those particular cracks.

1 And if you are asking for an iron-clad guarantee
2 that there would never be cracks going any deeper, you
3 can't give that, but we know that we don't expect it and
4 we know that we have a very sound reason or sound basis
5 for not expecting it. But we also know that there are
6 limits on the accuracy of eddy current determinations and
7 that there is the possibility of mechanical propagation to
8 a certain limited extent, which is well within range of
9 our ability to control it, detect it and take corrective
10 actions.

11 We really do believe that we will save the
12 unnecessarily plugging and taking out of some tubes by a
13 more realistic determination of the plugging criteria.
14 That is not to say there is any new tube degradation going
15 on. There isn't.

16 JUDGE SHON: You have confused me almost
17 completely now, Mr. Churchill in response to Dr. Paris'
18 question. You seem to be saying at once that one must
19 expect some additional cracking, but one has no evidence
20 to believe that there will be degradation, and I think it
21 is because you are using degradation in rather a narrow
22 sense.

23 If a crack propagates, regardless of what
24 reason, it thins the tube to the point where possibly the
25 tube could burst under one of the conditions that it is

1 not supposed to, safe shutdown, earthquake, LOCA, ordinary
2 operation and so on.

3 You seem to have at once said that there is no
4 reason to expect additional degradation, and yet one
5 naturally expects a little degradation. Doesn't it seem
6 that way?

7 MR. CHURCHILL: We have assumed, but we have
8 also realized that we don't know for sure how certain we
9 can be in that assumption.

10 What TMIA is referring to is the type of
11 degradation due to the sulfur excursions that occurred in
12 1981. This was a very unusual set of circumstances. We
13 know that has been arrested. We absolutely know that.
14 For the most part, as I say, that occurred up in the upper
15 tube sheets and it has been repaired. There are some
16 cracks now in the tubes.

17 Some cracks might be so small that you couldn't
18 see them now with eddy current. The volume might not just
19 be there. It might be lost down in the mud. That is a
20 situation that exists in any plant with any plugging
21 limit. You can either see the crack or you can't.
22 Operating stresses, thermal contractions and expansions
23 and so on might very well stress the tube and pull it a
24 little bit so that the volume of that, without even
25 progressing further, might open up a little bit so that

1 you could see it again. That is one thing. You never
2 know exactly for sure what you are going to get.

3 Oftentimes, as you know, when you go in on one
4 eddy current inspection you see an indication that looks
5 like a new crack. With that kind of hindsight you go back
6 to last year's and look down in the noise level and sure
7 enough there is something that you might have been able to
8 pick out if you had been a little more prescient or if
9 somehow you had seen it.

10 But that, I gather, that type of situation is
11 the main thing. It is clearly not from any new kind of
12 what I would call tube degradation.

13 The company believes and it is the company's
14 opinion that if you are going to see new cracks, it is
15 because something is going to happen that is going to make
16 a pre-existing crack more visible.

17 And, yes, there is the theoretical possibility
18 that there could be, due to thermal and mechanical
19 stresses, a slight growth in a crack that is already there
20 that we already know about and you are watching it go
21 through. But this is well within all the margins of
22 safety and our abilities to detect it.

23 All of these through the state of the art of
24 eddy current as it exists today we do have a good handle
25 on and we can do it, but it could mean that there could be

1 eddy current indications above 40 percent for either of
2 those reasons that would not otherwise on a rational,
3 logically calculated and analyzed basis require that that
4 tube be removed from service just because you could not
5 see it above 40 percent.

6 I can't begin to think that I could stay on the
7 same level with you on this technical discussion without
8 totally confusing you, but I am doing the best I can as I
9 understand it.

10 JUDGE SHON: Thank you. That is all.

11 JUDGE WOLFE: Mr. Au, do you have -- Mr. Au?

12 MR. AU: I have no argument to present.

13 JUDGE WOLFE: Ms. Wagner.

14 MS. WAGNER: We are prepared to address both the
15 question of basis and the collateral estoppel issue, if
16 the Board wishes to hear us on that.

17 JUDGE WOLFE: Yes.

18 MS. WAGNER: Ms. Young will be making those
19 presentations.

20 But I am wondering in light of the long list of
21 reasons to support Ms. Doroshow's contentions that we have
22 heard this morning orally for the first time that we might
23 have a couple of minutes to confer with our staff
24 technical expert who is here with us today, if that would
25 be all right with the Board.

1 JUDGE WOLFE: Yes, all right. We will have a 10-
2 minute -- yes, Mr. Churchill.

3 MR. CHURCHILL: Before we go, it has occurred to
4 me that there is another fairly obvious answer that I
5 could have given to that, too. Eddy current testing is
6 not always testing the same tubes. You test batches of
7 samples and, depending on those results, you test other
8 samples and so on.

9 You do generally test the same tubes that you
10 have tested before if there were any indications so that
11 you can track them, but you also test new tubes that may
12 not have been tested before. So if you see an indication
13 then, that doesn't mean necessarily that there has been
14 growth or a new crack.

15 Of course, we do have baseline, and I can't
16 remember the date, for all of the tubes, but not all of
17 the tubes get tested every year.

18 JUDGE WOLFE: A 10-minute recess.

19 (Recess taken from 10:25 a.m. to 10:40 a.m.)

20 JUDGE WOLFE: All right, Ms. Wagner.

21 MS. YOUNG: Judge Wolfe, I will be addressing
22 these issues.

23 JUDGE WOLFE: Ms. Young.

24 MS. YOUNG: I would first just like to start
25 with the basis for Contention 1. Ms. Doroshov's litany of

1 alleged facts that support her contention this morning are
2 really too extensive for me to refute one by one or even
3 address, but I would agree with the Board's observation
4 that it is not whether each of those statements have merit
5 under Commission precedent. You don't reach the merits of
6 contentions or bases under I think it is the Allen Creek
7 decision, but whether they are sufficiently particularized
8 to put the parties on notice as to what they will have to
9 defend against. I think that list in part by its length
10 meets that standard.

11 I would agree with Mr. Churchill that some
12 further identification of the reports that she is
13 referring to should be made. She mentions various
14 technical reports prepared by the licensee.

15 But I would have to disagree with Mr. Churchill
16 with respect to his statement that she primarily relies on
17 meetings between staff and licensee that occurred prior to
18 the Appeal Board's decision on the motion to reopen. I
19 think Ms. Doroshow was referring to remarks made at a
20 January '86 meeting between the staff and licensee where
21 the staff did indicate that further confirmation that the
22 tube corrosion as arrested would be needed if approval of
23 either tech spec change request No. 148 or 153 would be
24 granted.

25 So with respect to the basis for the contention,

1 it is the position of the staff that a minimally
2 sufficient basis has been shown.

3 With respect to the arguments on collateral
4 estoppel, I think it is important to focus on the issue
5 the Appeal Board had before it on reopening, and that was
6 whether the defects discovered as a result of the 1984
7 eddy current testing indicated that corrosion had
8 reoccurred.

9 The Appeal Board concluded that those defects
10 did not show that a new or different kind of corrosion had
11 occurred, but rather the intergranular attack was a
12 continuation of the previous corrosion that was identified
13 from the events that occurred in 1981.

14 Contention 1 seeks to highlight the lack of
15 assurance as to the rate of degradation following from
16 that corrosion which took place as a result of the
17 intergranular stress corrosion cracking.

18 The staff does not agree that the principle of
19 collateral estoppel would preclude admission of this
20 contention at this stage. While collateral estoppel is
21 generally applicable to NRC proceedings, there are
22 exceptions which weigh against its application, one being
23 that there is changed circumstances or, two, that there is
24 a public policy or public interest consideration which
25 would favor relitigation of the issue.

1 JUDGE WOLFE: How about being raised at the
2 conference level in an effort to preclude the
3 admissibility of a proposed contention as against being
4 used solely at the motion for summary disposition stage.

5 MS. YOUNG: I am not familiar with the
6 authorities that Mr. Churchill referred to, but I think
7 the short digest I have at least on the Seabrook case that
8 he cited talks about issues that were litigated at the
9 construction permit stage not being allowed admission at
10 the operating license stage. So it may well be that other
11 Boards have taken that approach.

12 But I think once collateral estoppel has been
13 raised in this proceeding that Ms. Doroshow's
14 particularized showing of alleged changed circumstances is
15 sufficient to warrant a decision which would allow the
16 admission of the contention rather than precluding its
17 admission.

18 JUDGE WOLFE: While you are speaking of
19 collateral estoppel, Mr. Churchill in the two cases you
20 cited, the Perry case being one, and I have forgotten the
21 name of the other.

22 MS. YOUNG: I believe it was Seabrook.

23 JUDGE WOLFE: Seabrook. In those two cases was
24 it raised and discussed during the prehearing conference
25 as to whether it was proper to raise collateral estoppel

1 at the prehearing conference stage?

2 MR. CHURCHILL: Your Honor, I don't know ---

3 JUDGE WOLFE: Was it just collateral estoppel
4 was raised and the particular Licensing Board said we
5 agree collateral estoppel obtains and the contention is or
6 is not admitted?

7 (Board conferring.)

8 The Board is full well aware that there have
9 been cases, and I think you did cite the South Texas case
10 where most certainly there was I think a summary
11 disposition procedure, but I am just not certain about the
12 two cases you cite.

13 Go ahead.

14 MR. CHURCHILL: Maybe I could help a little
15 bit. I believe in the Perry case they do have a
16 discussion on the appropriateness of using the procedure
17 at that stage in the proceeding. I would have to go back
18 and look at it a little more carefully to give you a more
19 definitive answer than that.

20 There is, however, I think on this particular
21 issue an even better case, and that is the Alabama Power
22 Company case. This is a Commission opinion. What
23 happened there was below. The Board constituted to hear
24 the intervention petitions ruled out one of the
25 contentions on collateral estoppel. The Appeal Board

1 affirmed the Licensing Board's having done that at the
2 prehearing conference state.

3 The Commission reversed the Appeal Board. But
4 in so doing the Commission said that the purpose of this
5 decision, and this is CLI-74.12, 1974, and we have cited
6 this on page 10 of our response to the supplement to the
7 petition to intervene in OLA-1, it is 7AEC-203-204, the
8 Commission itself said yes, in fact the purpose of this
9 decision is to address the question of when collateral
10 estoppel is applicable, and they said in fact, yes, it was
11 appropriate for the Licensing Board at the prehearing
12 stage to dismiss or not admit a contention because of
13 collateral estoppel.

14 The reason it got reversed was because the
15 Licensing Board had not given the intervenor a chance to
16 respond to the arguments for collateral estoppel. That is
17 not the case we have here because we have advanced these
18 arguments earlier and Ms. Doroshow does indeed and in fact
19 has responded.

20 But they specifically said that it should be
21 remanded back to the Board that was established "to rule
22 on intervention petitions." And when it is remanded back
23 then, that petition shall be afforded an opportunity to do
24 one or the other of the two things that Ms. Young referred
25 to, make a particularized showing of such changed

1 circumstances or public interest factors as might exist
2 with respect to this particular proceeding.

3 So I think this Commission decision answers your
4 question that the Commission itself has realized and has
5 established that it is appropriate at this stage. I don't
6 have the Maguire case and so I can't answer your question
7 specifically of whether that was different or whether it
8 was somehow inconsistent with this.

9 But I do believe, and I believe very strongly
10 that the Board can, if the circumstances decree, rule on
11 collateral estoppel at this stage. However, I agree also
12 with Ms. Young that one way to defeat collateral estoppel
13 is to make a particularized showing of changed
14 circumstances since the last decision was made. I just
15 disagree that that has been done because I haven't been
16 pointed to any information where it has been done.

17 (Board conferring.)

18 JUDGE WOLFE: All right, Ms. Young, back to
19 you. I am sorry for the interruption.

20 MS. YOUNG: That's okay. But to continue along
21 this line, when the Appeal Board made its ruling about the
22 corrosion in the steam generator tubes at TMI, the
23 information it had before it was in part dependent upon
24 the assumption that tube defects greater than 40 percent
25 throughwall would be plugged, and they indicate that on

1 page 1209 of that decision. I think it is 22NRC-1197 and
2 1209.

3 They also indicate in a footnote that the
4 application to revise the plugging criteria was pending or
5 would be filed with the staff, but they were giving no
6 consideration to that.

7 I basically raise that issue to say that in
8 terms of the merits of the issues that the Appeal Board
9 ruled on, an integral part of the conclusion they reached
10 as to the absence of new corrosion or a different kind of
11 corrosion was based on the assurance that tubes with
12 greater than 40 percent throughwall would be plugged.

13 With the licensee's request for change of this
14 plugging criteria, the staff also in its reviews has had a
15 question about the extent of the intergranular attack and
16 has requested additional assurance that the corrosion rate
17 has been arrested and also about what expectations it
18 should have as to the extent of the enlarging of the
19 intergranular attack cracks or defects before the next
20 plugging interval or the next cycle where the tubes are
21 inspected.

22 So I think the issues raised in Contention 1 as
23 to the form of the degradation since the 1984 eddy current
24 testing and the rate of the degradation in particular, the
25 extent of the fall-out or the rate of the fall-out of the

1 grains in the cracks from the intergranular attack is a
2 pertinent inquiry for this Board and is also going to play
3 an integral part in the staff's review of the tech spec
4 change request 148 in particular which requests the larger
5 percentage throughwall plugging criteria.

6 So to summarize, the staff basically disagrees
7 that collateral estoppel should be applied in this
8 situation on two points. One, that the issue is a little
9 different than that decided by the Appeal Board to the
10 extent that it has to do with the rate of the expansion of
11 the cracks caused by IGA or the grain fallout, but also
12 that the request for revised plugging criteria is in part
13 a changed circumstance which warrants inquiry once again
14 into assurance as to the rate of the corrosion or
15 degradation that the tubes may see in the future.

16 JUDGE WOLFE: All right. Well, I think we have
17 completed argument on Contention 1.

18 MS. DOROSHOW: If part of the licensee's problem
19 here is that they don't feel that they are on notice in
20 terms of what particular technical document reports I have
21 been relying on, I certainly would be willing to provide
22 that information on the record here or to the licensee
23 informally, and I am sure that that is going to be done
24 during discovery in this proceeding.

25 JUDGE WOLFE: Well, how long a laundry list is

1 that?

2 MS. DOROSHOW: Excuse me?

3 JUDGE WOLFE: How long a list is that?

4 MS. DOROSHOW: Just a few technical document
5 reports.

6 JUDGE WOLFE: All right. You might specify what
7 they are, if you wish.

8 (Pause.)

9 If you want to that is.

10 MS. DOROSHOW: It is up to the Board. I mean I
11 am willing to do it if there is still a question as to
12 whether that is necessary or not.

13 JUDGE WOLFE: Well, it is not necessary to the
14 Board's mind. It has heard enough argument, it seems to
15 me, that if this contention is admitted these matters can
16 be gone into on discovery.

17 (Board conferring.)

18 All right. We will now proceed on to Contention
19 2.

20 Ms. Doroshow.

21 MS. DOROSHOW: The wording in Contention 2 is
22 actually derived from a statement by Mr. Crutchfield
23 during the January '86 staff GPU meeting in which he said
24 "There are some questions about the accuracy of the
25 testing technique in light of the particular method of

1 attack."

2 I would like to be more specific in terms of
3 describing what problems or what factual issues there are
4 regarding the testing technique. A number of these were
5 addressed in or discussed in TMIA's motion to broaden the
6 hearing scope, but briefly our position is that the
7 testing method has not been demonstrated as accurate or
8 complete for the following reasons.

9 First, that the new indications are
10 characterized by IGA and pitting, which can be difficult
11 to detect using eddy current methods.

12 Second, that new indications are also
13 characterized by grain dropout, which can in certain
14 circumstances mask otherwise detectable cracks.

15 Third, that the circumferential length is
16 difficult to accurately determine.

17 Fourth, that the determination of throughwall
18 penetration is based on curves, the accuracy of which has
19 been unverified through metallographical comparisons.

20 Fifth, that eddy current cannot distinguish
21 between OD and ID flaws at the same elevation.

22 Sixth, generally that there has been no
23 verification of the determinations of crack configurations
24 through metallurgical comparisons with actual pulled
25 tubes.

1 Now the specific basis for these points is
2 derived both from the licensee's technical document
3 reports as well as conversations between the staff and GPU
4 at the meetings in 1985 and 1986.

5 I think that there is no question that IGA,
6 which characterizes many of the new indications cannot be
7 accurately tested using eddy current methods unless there
8 is some grain dropout.

9 The company's contractor, ConAm, concluded in
10 TDR-686 that "metallography was not successful in
11 determining the detectability of IGA by eddy current, and
12 due to the close proximity of indications to each other
13 and the imprecision of location measurements, these
14 correlations can only be considered approximate."

15 The grain dropout problem, which can mask
16 otherwise detectable cracks, was mentioned in the tech
17 spec change request 148 in a discussion at pages 11 to 12
18 of that document where the company is responding a
19 question raised by the staff in that past TMI inspections
20 seemed to show that in some cases cracks originating at
21 the base of IGA or intergranular pits propagating further
22 through the tube thickness rather than through the IGA,
23 and that if the grain dropout proceeded through the tube
24 thickness, through the crack itself, then the crack would
25 be masked and that eddy current would not be able to pick

1 it up accurately.

2 There also seems to be no question that the
3 company is unable to say at this point whether grain
4 dropout is going to continue.

5 There are also uncertainties regarding eddy
6 current techniques in detecting detectable cracks in that
7 traditional curves in determining throughwall penetration
8 were designed for the more common outer diameter defects,
9 which GPU claims overcalls small volume ID defects. So
10 they have developed a new curve and extrapolated using
11 supplemental data, which has not been verified or tested
12 through actual destructive testing on pulled tubes.

13 In addition, both OLA-1 and OLA-2 would rely on
14 determinations of circumferential length. I think that
15 there is evidence that these coil measurements are not
16 always accurate and can underestimate crack size.

17 In addition, it is recognized in TDR-758 that
18 the structural problem of OD and ID surface flaws at the
19 same elevation has not been resolved.

20 ConAm, the company's contractor, concluded in
21 TDR-686 that due to the close proximity of eddy current
22 indications to each other and the imprecision of location
23 measurement correlations of eddy current indications and
24 visual and metallogical results, eddy current indications
25 can only be considered approximate.

1 The staff noted on the record of its meetings
2 with the company on several occasions that one of the
3 considerations primarily in the staff's mind was to get
4 some confirmation on the eddy current technique versus
5 actual metallurgical examinations before they felt
6 comfortable approving what the company is proposing.

7 JUDGE WOLFE: So it is in both cases then that
8 you question the accuracy of eddy current testing. It is
9 not just in OLA-1.

10 MS. DOROSHOW: No, it is in both cases. I think
11 the problems are similar.

12 JUDGE WOLFE: All right.

13 MS. DOROSHOW: That concludes my argument.

14 JUDGE WOLFE: Mr. Churchill.

15 MR. CHURCHILL: Thank you, Your Honor.

16 Once again I would like to make what I think
17 will be my standard opening on this, which is I object to
18 this unauthorized amendment of the supplement to the
19 petition at this late date.

20 2,714(b) specifically says that the basis and
21 the contentions as well as the basis have to be specified
22 ahead of time. This Board said the same thing in its
23 order.

24 If there is going to be an amendment of any part
25 of the petition, it has to be in consideration of the

1 factors specified in 2.714(a)(1), the first one of which
2 is good cause shown for failure to do it before. There
3 has been no good cause shown. The bases simply weren't
4 submitted. We again are hearing them for the first time.

5 JUDGE WOLFE: Well I must say that as a legal
6 member of this Board and for some time, I have not been
7 happy with the wording of 2.714. I have no idea what
8 bases with reasonable specificity means. And for a lawyer
9 and a Judge to say that, that is going pretty far on the
10 vagueness of the regulation. I am hopeful that there will
11 be an amendment to that regulation, and I think there will
12 be, or I hope there will be, that that proposed contention
13 shall be supported by at least some reference to evidence,
14 to documents. I am hopeful that will be done.

15 But in any event, that is my insert for the day.
16 (Laughter.)

17 MR. CHURCHILL: The last one?

18 JUDGE WOLFE: No, I didn't promise that.
19 (Laughter.)

20 MR. CHURCHILL: However difficult it is, it must
21 mean there is some basis though, and there simply wasn't.
22 It was just the bold sort of sweeping opinion that the
23 eddy current testing was inaccurate and inconclusive.

24 Now eddy current testing adequacy per se is not
25 an issue here. The whole eddy current procedure as it is

1 applied across the board to all the tubes in the industry
2 is not at issue. What is at issue is how their allegation
3 that it is inaccurate and inconclusive relates somehow to
4 our wanting to change the plugging criteria.

5 We know there are some indications that can't be
6 detected with eddy current. There is a threshold of
7 detectability that is common for all units, for all
8 plants, and there is a certain degree of margin of error
9 that is taken into consideration, not only in detecting,
10 but actually in quantifying what you do detect.

11 Every plant is faced with that situation. We
12 think we are faced with a little less than others because
13 there has been a fairly substantial eddy current
14 development program and we use two different methods. We
15 go in with a more accurate eight by one probe if we see an
16 indication in the first time.

17 But, nevertheless, there is a threshold of
18 detectability and the staff has taken that into
19 consideration in accepting eddy current as one method of
20 determining the state and the status of the physical
21 condition of the tubes.

22 If a tube has an eddy current indication that is
23 masked, the chances are it is because either the length,
24 or that is the amount of penetration of the tube is so
25 small that it is down hidden in the noise level, the

1 electronic noise level, or it is because the crack is so
2 tight that there is no sufficient volume that you maybe
3 cannot detect it. But everybody has that situation and
4 that is why there is a 10 percent margin of error built in
5 an eddy current detection and that is why analyses have
6 been done.

7 On the fracture mechanics analysis, for example,
8 there is another 10 percent margin of error built in for
9 residual wall thicknesses. As a matter of fact, with
10 respect to CREW-153 it would be a 20 percent marginal
11 error because that is a nominal throughwall percentage and
12 we are talking about 50 percent max. So it would be at
13 least a 20 percent margin of error.

14 The fact remains that to simply say eddy current
15 testing is inconclusive and inaccurate is not enough to
16 get this contention litigated in this hearing. You have
17 got to say why that is a reason that the tech spec
18 plugging limit should not be changed. They haven't done
19 that.

20 Now let me analyze that just a little bit. Are
21 they talking about the inability to determine the depth of
22 penetration of the throughwall crack? I don't think so.
23 There has been nothing cited that says that if you have a
24 crack that the degree of accuracy, which has been accepted
25 by the NRC for all other plants, is inadequate for this

1 situation, and we do have the margin and that is right in
2 the TDR documents that have accompanied this change
3 request.

4 Therefore, what could it be? Well, the first
5 thing that Ms. Doroshow said was IGA is difficult to
6 detect. That is true. IGA is difficult to detect. IGA
7 is in the form of a small shallow pit, and if IGA occurs
8 as a degradation of the grains but if the grains don't
9 fall out, eddy current has a difficult time seeing it. It
10 can be seen, but you have to have a practiced eye. That
11 is why when the grains do fall out and you later go back
12 and see it and you go back before you say yes, there was
13 the indication.

14 But IGA indications are shallow. If the IGA
15 indications were up even close to 40 percent, there is no
16 evidence that they wouldn't be detected at that point.
17 Furthermore, grain dropout by now, since this occurred in
18 '81, there has been any number of hot functional tests,
19 plus we have had almost a year of operating experience so
20 far, there is no reason to suspect that there hasn't been
21 grain dropout.

22 But whether or not there has been grain dropout,
23 there is no nexus or there is no relationship between
24 whether you have a pit of IGA, a shallow pit of IGA in the
25 changing of this plugging criteria. If the plugging

1 criteria is left at 40 percent, you still can't see the
2 IGA any better than you can see it if the plugging
3 criteria was at 50 percent, and there is certainly no
4 basis to suggest that IGA, this little critter that is so
5 elusive to us at least on first blush, is anywhere going
6 to be creeping up anywhere near 40 percent. So there is
7 no relationship to the inability to detect IGA and a
8 request to modify the plugging criteria.

9 Now Ms. Doroshow then stated that the IGA could
10 mask otherwise detectable cracks. Now IGA is not a crack,
11 but IGSAC, which is the other type of problem we had, is a
12 crack. She cites change request 148 at pages 11 and 12,
13 but there is no basis for that.

14 The NRC asked a question on 11 and 12. They
15 said "Examination of defective tubes removed from TMI-1
16 steam generators during past inspections has shown that in
17 some cases there were cracks originating at the base of
18 intergranular pit-like defects propagating further through
19 the tube thickness than the IGA. Such cracks may not be
20 fully detectable due to the effect of the grain dropout
21 associated with these pits. How is this taken into
22 account in the proposed criteria?"

23 And the response was those cracks are
24 detectable. There have been no cases where there has been
25 a crack and an IGA pit together and that grain dropout has

1 somehow masked it. In fact, the only one case where you
2 even found that situation together, and this is documented
3 right on page 12, they called it at 95 percent when it was
4 100 percent, which is right on the money. Eddy current-
5 wise you couldn't get any better than that, and that is a
6 pluggable indication.

7 So all it was was a question, and the answer is
8 right there that lays it to rest absolutely. So there is
9 no basis for the suggestion that this IGA is going to
10 somehow mask deeper cracks.

11 We hear now for the first time that the length
12 of the crack is going to be difficult to determine. No
13 basis is cited. I think her quote was "I think there is
14 evidence that it can undercall crack size." That was the
15 only basis "I think there is evidence." Your Honor, there
16 is no evidence.

17 As a matter of fact, this is the most
18 conservative part of the whole thing. We are not
19 measuring exact crack lengths at all by any means. What
20 we do is we go in with an eight by one probe, meaning
21 there are eight coils around the circumference of the
22 probe, each one of which is independent.

23 If there is an indication on two coils, and that
24 means that somehow the crack is long enough that both
25 coils pick it up, that means that the maximum length that

1 crack could be if it wasn't picked up by the third coil is
2 .413 inches. We don't really know how much into each coil
3 that crack goes, but once more than one coil picks it up
4 we give it and assign it the full maximum length that it
5 could be. Therefore, what happens with this method, which
6 we cannot accurately measure lengths with, crack lengths
7 with, is used to very conservatively overcall.

8 This was discussed somewhat, and I am not
9 arguing collateral estoppel on this, but I would refer you
10 to a footnote in ALAB 807, and I believe it is Footnote 68
11 where the Appeal Board itself noted that based on TDR 666
12 that this method of measuring the crack length, and by
13 crack length I mean the circumferential length of the
14 crack, overcalls and not undercalls crack length.

15 So there is no basis to suggest that one of the
16 dimensions that we need, the crack length, to implement
17 the new criteria is inaccurate other than the fact that we
18 overestimate it to the maximum. And if a tiny, little bit
19 of that crack should spill over and be picked up by yet a
20 third coil, we would call that crack as one that was a
21 full three-coils long even though it might not be anywhere
22 close to that. So the crack could be what we call it, but
23 it can't be more and it could be considerably less.

24 In that respect, there is no basis for a
25 contention that eddy current testing is inaccurate and

1 inconclusive with respect to measuring the crack length.

2 Now that takes care of both of the two
3 dimensions that we are concerned with, the penetration,
4 for which there is built-in margin based on the same
5 standards that everybody else in the industry has, and the
6 crack width, which other people don't have to measure, but
7 which we are measuring and which overcalls it.

8 Now the conversion curve. She says that we have
9 used a conversion curve that has not been adequately
10 verified. Where is the basis for it?

11 Now I don't want to get into an argument about
12 whether or not it has been adequately verified, but I will
13 say this, that the documentation that we produced showed
14 that it was adequately verified. It was developed using
15 the EDM notches, which is an electro-discharge machine
16 that simulates notches and then they take eddy current
17 tests on the actual materials, the actual tubing materials
18 and they draw correlations. They confirmed it using
19 actual IGSAC samples, and they have taken other places
20 where they have actually simulated defects, actual tubes
21 that were pulled from the reactor.

22 Now, granted, we are not here to argue whether
23 or not this conversion curve has been adequately
24 verified. All I am saying is that we have presented
25 evidence that it has been. They have presented no basis

1 to suggest that it hasn't, none. They can't just come in
2 and say I disagree. Whatever the basis requirement is, it
3 is more than I, TMIA, am not satisfied.

4 There has to be some basis for reasonable minds
5 to inquire further. There has to be some reason to
6 suggest that something that we or the NRC in its analysis
7 is not quite up to par, some reason to say this is
8 something that should be litigated and not just the
9 opinion that I don't like it. I, TMIA, disagree. There
10 has got to be more than that, and in this case there is no
11 more.

12 Now I don't understand the other point she made
13 about the OD/ID flaws can't be distinguished one from
14 another. All I can say to that is if that is a problem,
15 you have got it whether it is 40 percent or 50 percent or
16 60 percent or 70 percent, and there is no relationship as
17 to why that would be any different.

18 I mean the eddy current is going to pick it up
19 based on the amount of good tube material left. I just am
20 at a loss right now to explain whether or not it is right
21 that the eddy current can't tell whether that is all OD or
22 ID, but it can tell it is there and that is the criteria.

23 Then, finally, the point that there is no
24 verification of crack configurations through pulled
25 tubes. Well, Your Honor, the record is replete with the

1 showings of what kind of eddy current accuracy we have and
2 why it is okay. There is lots of documentation about
3 that. It was based on pulled tubes and there were tubes
4 pulled in 1982. It is based on a lot of other things. It
5 is based on industry experience. It is based on our own
6 experience, our own testing programs.

7 The mere fact that now an intervenor comes in
8 and says I think you should have one more data point and
9 therefore it is inadequate cannot possibly be considered a
10 basis for saying this is inadequate. We are as good or
11 better as any eddy current program in the country, and
12 there is no indication that we have in the way of eddy
13 current abilities is inadequate for the changing of the
14 plugging limit.

15 That completes my argument on my response on
16 Contention 2.

17 JUDGE WOLFE: Mr. Au?

18 MR. AU: I have no argument on this contention.

19 JUDGE WOLFE: Ms. Wagner.

20 MS. WAGNER: The staff's problems with
21 Contention 2 as drafted, as we stated in our written
22 response to the contention, was that it was not clear to
23 us what was meant by the words "particular method of
24 degradation."

25 It appears to us this morning in listening to

1 the discussion that has taken place so far that what is
2 meant is IGA.

3 Is that correct, Ms. Doroshow?

4 MS. DOROSHOW: In terms of the particular method
5 of attack language, yes, but the concerns are beyond that.

6 MS. WAGNER: Right. My problem with the
7 contention as it was submitted was I didn't know what the
8 actual words meant.

9 MS. DOROSHOW: And pitting also.

10 MS. WAGNER: It means IGA and pitting?

11 MS. DOROSHOW: IGA, pitting and grain dropout,
12 yes.

13 MS. WAGNER: Grain dropout and IGA are the
14 same. I mean I wonder whether you are drawing a
15 distinction between them?

16 MS. DOROSHOW: Yes, grain dropout can occur with
17 IGA, but it doesn't have to, and if it does sometimes that
18 can affect eddy current.

19 MS. WAGNER: All right. Thank you.

20 I think that with the clarification that we have
21 received this morning that the staff no longer has a
22 problem with the wording of Contention 2. I believe as
23 long as it is clarified as to what is meant by the words
24 "particular method of degradation," we believe that
25 adequate bases have been stated.

1 A lot of the arguments we have heard this
2 morning from counsel for licensee seem to me to be getting
3 into the merits, and the staff will if contentions are
4 admitted in this proceeding, the staff will at an
5 appropriate time address all of these bases on the merits,
6 but I don't believe it is appropriate to do it at this
7 point. That is proper for summary disposition or for a
8 hearing.

9 So if there is clarification along the lines
10 that Ms. Doroshow just gave us now as to what is meant by
11 the particular method of degradation, the staff would
12 withdraw our objection to Contention 2.

13 One further thing I would just like to mention.
14 With respect to amending her contentions, I believe an
15 amendment at this time with regard to OLA-1 might well be
16 out of time, but with regard to OLA-2, I don't believe it
17 would be untimely at all to file an amendment.

18 Generally a party is given up to 15 days before
19 the first prehearing conference to file contentions, to
20 amend contentions, whatever, without leave of the Board to
21 do that. This is an unusual situation in that the notice
22 of the prehearing conference really referred to 148 or OLA-
23 1 only.

24 In fact, the notice of the amendment in OLA-2
25 has not even run its 30-day period yet. So the staff

1 would not oppose as untimely an amendment at this point to
2 153.

3 JUDGE WOLFE: Whereas you would object to an
4 amendment to OLA-1 as untimely?

5 MS. WAGNER: Yes. She would have to make the
6 showings required to come in with an untimely filing. Now
7 it hasn't been a lengthy period of time since the
8 expiration of her time to amend as of right. So I think
9 that is certainly a factor that we would take into
10 consideration, but I believe she would have to meet the
11 requirements for filing late. We would have to see her
12 submittal.

13 (Board conferring.)

14 JUDGE SHON: Would the staff prefer that the
15 actual wording of the contention be changed?

16 MS. WAGNER: That would be our preference.

17 JUDGE SHON: I see.

18 JUDGE WOLFE: What would you suggest as to
19 precise wording and/or Ms. Doroshow and let's get this
20 before us.

21 JUDGE SHON: As a Board we are very reluctant to
22 phase an intervenor's contentions.

23 MS. WAGNER: And of course the Board is not
24 required to reframe an intervenor's contentions so as to
25 make an otherwise inadmissible contention admissible.

1 JUDGE SHON: That is exactly the point.

2 MS. WAGNER: However, in the absence of some
3 agreement as to what is meant by this contention, which I
4 think on its face is vague, the staff would have to
5 continue to oppose it.

6 JUDGE WOLFE: Well, how about on OLA-2? You say
7 it wouldn't be untimely there to amend, and let's just
8 direct our attention to OLA-2.

9 MS. DOROSHOW: Would it be sufficient to simply
10 add in light of the particular method of degradation
11 characterized by IGA and pitting?

12 MS. WAGNER: That would be sufficient to resolve
13 the staff's concerns.

14 JUDGE PARIS: Would you give us the words that
15 you have put in there again, please?

16 MS. DOROSHOW: Characterized by IGA and pitting.

17 JUDGE WOLFE: Plural? Pittings did you say?

18 MS. DOROSHOW: Pitting, p-i-t-t-i-n-g.

19 JUDGE SHON: That would go at the end of the
20 contention; is that right?

21 MS. DOROSHOW: That is correct. I would like to
22 move that the contention be amended to read with that
23 additional language included, and I would like to move for
24 leave to amend Contention 2 regarding OLA-1 as well as 2
25 recognizing that the amendment is technically amended, or

1 the request to amend the contention is technically out of
2 time.

3 I think in the interest of this proceeding going
4 forward smoothly with everybody's understanding being
5 clarified, I think it would seem reasonable to amend both
6 contentions at this time so that they read the same way.

7 (Board conferring.)

8 MS. WAGNER: Judge Wolfe?

9 JUDGE WOLFE: Yes.

10 MS. WAGNER: Addressing the instant motion to
11 amend Contention 2 in the OLA-1 proceeding, in light of
12 the fact that what it appears TMIA is doing is really
13 clarification rather than presenting really a different
14 contention, the staff does not oppose her motion to amend
15 the language of the contention as she has proposed, in
16 other words, adding the words "characterized by IGA and
17 pitting," and also taking into account the fact that it
18 has only been a matter of I think two weeks since her
19 right to amend has expired without leave.

20 MR. CHURCHILL: Your Honor, my statements about
21 objecting to the amendment of the supplement to the
22 petitions has to do with the fact that that supplement was
23 supposed to have contained the basis for the contentions.
24 It did not.

25 The attempt at this date to come in here at the

1 time when we are supposed to be arguing them and stating
2 the basis is what I was referring to as constituting an
3 improper amendment to the supplement to the petition to
4 intervene. That should have been stated before. There
5 were no bases stated before.

6 JUDGE WOLFE: Is there now?

7 MR. CHURCHILL: Pardon me?

8 JUDGE WOLFE: Is the clarification, what Ms.
9 Wagner speaks to as clarification ---

10 MR. CHURCHILL: No, sir.

11 JUDGE WOLFE: You still say there is no basis?

12 MR. CHURCHILL: Absolutely I say there is no
13 basis.

14 JUDGE WOLFE: But you don't object anyway to the
15 motion?

16 MR. CHURCHILL: As far as TMIA wanting to amend
17 the wording of their proposed motion, not their proposed
18 contention, they can amend that. I don't object to the
19 amendment of that. My arguments on the fact that they
20 have not stated a basis for the fact or a nexus of a two-
21 pronged argument on this one, basis and nexus, doesn't
22 change by the wording of the contention. I still object
23 to the contention as much as I did before for the exact
24 reasons, but I do not object to her modifying the wording
25 of her proposed contention.

1 The actual contention, if it is admitted, will
2 be as the Board frames it, and as a matter of fact, the
3 Board is free, based on what it hears, to specify, clarify
4 and change the wording of contentions to make them more
5 litigable.

6 JUDGE WOLFE: All right. We deem the motion to
7 be one to clarify and/or supplement.

8 There being no objection, Ms. Doroshow, to that,
9 the Board grants the motion and the words "characterized
10 by IGA and pitting" will be added to TMIA Contention 2.

11 All right.

12 MS. WAGNER: Excuse me, Judge Wolfe, did you
13 just say in OLA-2 or did you rule on OLA-1?

14 JUDGE WOLFE: Contention 2.

15 MS. WAGNER: Oh, excuse me. In both
16 proceedings?

17 JUDGE WOLFE: Yes, in both proceedings.

18 Anything more, Ms. Wagner?

19 MS. WAGNER: Well, since Mr. Churchill raised
20 again the issue of surprise in a sense coming from TMIA,
21 and hearing arguments for the first time this morning, I
22 would just like to point out that I believe I read a
23 number of those arguments in a slightly different form in
24 TMIA's initial formal demand for adjudicatory hearing in
25 OLA-1 on December 23rd, '85. At that point contentions,

1 it is certainly true, contentions were not being
2 submitted.

3 JUDGE WOLFE: This came under so-called what,
4 aspects of the case? Is that what TMIA was arguing at
5 that point?

6 MS. WAGNER: They were attempting to present
7 aspects at that point.

8 JUDGE WOLFE: Yes, and from that presentation
9 you say that there really are not surprises at least to
10 date?

11 MS. WAGNER: Well, I am not sure I would say no
12 surprises, but a number of the bases presented this
13 morning, particularly in regard to eddy current testing,
14 the problems there, were touched on in her December 23rd,
15 '85 pleading.

16 MS. DOROSHOW: You may have read them also in
17 TMIA's motion to broaden the scope. I think that may be
18 where you saw them because that is the document that went
19 into more detail in terms of eddy current deficiencies.

20 MS. WAGNER: Thank you for the correction.

21 JUDGE WOLFE: All right.

22 Anything more, Ms. Doroshow?

23 MS. DOROSHOW: Just a couple of points.

24 In terms of the circumferential length problems,
25 and the citation for that is TDR-686, in which in two

1 cases of coil measurements there were defects measuring
2 one coil or actually the indication was longer than the
3 eddy current indicated.

4 On the OD and ID matter of the cracks at the
5 same elevation, the point there is that the company is not
6 requesting a modification in their plugging criteria
7 regarding OD defects. So that, for example, if a 60
8 percent crack is detected, a throughwall crack is detected
9 and OLA-1 is approved, then there would have to be some
10 determination as to whether that was an OD or ID defect in
11 order to determine whether the crack would need to be
12 plugged under their criteria.

13 The company says they would always disposition
14 those situations conservatively, but I think that that is
15 a legitimate issue.

16 JUDGE WOLFE: Is that it?

17 MS. DOROSHOW: Yes.

18 JUDGE WOLFE: All right. We will proceed now to
19 Contention 3.

20 Ms. Doroshow.

21 MS. DOROSHOW: Contention 3 addresses compliance
22 with general design criteria 32.

23 The issue came to our attention during a meeting
24 between the NRC and the staff in February of '85 in which
25 one of the staff members raised why GPU had not

1 demonstrated compliance with this general design criteria
2 32.

3 There was not too much discussion regarding that
4 issue on the record of that meeting. However, the general
5 design criteria concerns the ability of the company to
6 test the leak tight integrity of the primary pressure
7 boundary I believe.

8 The issue concerns whether or not the leak rate
9 testing procedure which the company has in place now, if
10 the plugging criteria is amended and cracks greater than
11 40 percent throughwall are allowed to remain in service,
12 whether or not that current procedure would be adequate to
13 detect a crack before it ruptures and it basically
14 addresses the leak before break philosophy.

15 TMIA doesn't have any other independent basis
16 for supporting this as a contention other than what was
17 mentioned at the meeting between GPU and the NRC.

18 JUDGE WOLFE: Is that it, Ms. Doroshow?

19 MS. DOROSHOW: Yes.

20 JUDGE WOLFE: Mr. Churchill.

21 MR. CHURCHILL: The issue as she has stated it
22 is whether or not the leak test procedures would be
23 adequate after a change in the plugging criteria and not
24 on the basis of something that would cause reasonable men
25 to inquire further, and I believe there wouldn't be, but

1 it is whether or not there would be. That is not adequate
2 to get a contention litigated.

3 A person could come in and say I wonder whether
4 or not any component of a plant anywhere would be
5 adequate. Beyond that, I cannot find any relationship to
6 GDC-32 and a change in the plugging criteria.

7 This goes to the design of the reactor pressure
8 boundary, the primary coolant pressure boundary. It has
9 nothing to do with the criteria for plugging. It says
10 that it shall be designed to permit periodic inspection
11 and testing of important areas.

12 Changing the plugging criteria has absolutely
13 nothing to do, or doesn't affect one way or another what
14 can be permitted or not. It doesn't change periodic
15 inspection, it doesn't inhibit it and it doesn't hamper it
16 in any way.

17 I am totally at a loss to relate GDC-32 to a
18 request to change the plugging criteria, and obviously
19 item 2 doesn't apply. That talks only about the pressure
20 vessel.

21 Now for the first time I have heard
22 clarification, and I had no idea this is what TMIA meant,
23 was that for some reason if you have a different plugging
24 criteria your leak testing is going to be inadequate.

25 TMI has the tightest and most stringent leak

1 test requirements of any plant in the country. I think
2 there may be one other that has the same kind. It is very
3 stringent and it is very tight. There is no way that you
4 could really change those or improve on those leak testing
5 conditions, but there is no relationship of those to this.

6 The analysis of the adequacy of the plugging
7 criteria based on the mechanical fracture analysis of the
8 amount of good tube wall material you have left and the
9 ability to withstand the various loads under normal
10 operating and transient and design basis conditions shows
11 that for cracks up to a certain duration it will withstand
12 that.

13 It does not talk about whether or not this is
14 going to cause leakage. I don't see how it could cause
15 leakage. A tube can't leak unless the crack goes all the
16 way through. The analysis shows that these are going to
17 be picked up before they go all the way through.

18 If the tube does cause leakage, the tests pick
19 it up. Now where in the world is there a relationship
20 between the fact that this leak testing procedure that we
21 have is somehow going to be inadequate because the
22 plugging criteria is changed?

23 I didn't understand the contention when it was
24 framed and I didn't relationship between the contention
25 and the plugging criteria. Now that it is explained that

1 they are somehow worried about the leak testing
2 procedures, I still can't understand it. They haven't
3 said what is wrong with any existing leak test procedures,
4 let alone relate those to the plugging criteria.

5 This contention should be rejected because of
6 lack of basis and because of lack of relationship to the
7 amendment request at issue and because it is so vague
8 because of those reasons that it is virtually
9 unlitigable. We wouldn't know where to start.

10 JUDGE WOLFE: Mr. Au?

11 MR. AU: I have no argument.

12 JUDGE WOLFE: Ms. Wagner.

13 MS. WAGNER: The staff as well can see
14 absolutely no relationship between GDC-32 and the
15 amendment request.

16 Now Ms. Doroshow referred to a statement by an
17 NRC staff member at a February '85 meeting at which GDC-32
18 I believe was raised. I don't want to try to testify or
19 speculate too much, but it may well have been a
20 misstatement by the staff member in referring to GDC-32.

21 In responding to this contention as phrased, the
22 staff has been unable to come up with a relationship
23 between GDC-32 and the amendment request. So we would
24 oppose admitting this contention.

25 JUDGE WOLFE: Ms. Doroshow, anything more?

1 MS. DOROSHOW: Nothing more.

2 JUDGE WOLFE: We will continue then to
3 Contention 4.

4 Ms. Doroshow.

5 MS. DOROSHOW: Contention 4 which concerns
6 whether or not there is demonstrated to be compliance with
7 GDC-31 is derived from concerns expressed apparently by
8 the staff to the company as discussed on page 8 of tech
9 spec change request No. 148.

10 What seems to be the staff's concern is that GPU
11 has demonstrated compliance with GDC-31 by using certain
12 ASME methodology which directs that variables affecting
13 data should be considered including environmental effects
14 and that GPU has not taken environmental effects into
15 account for either of the license amendments.

16 JUDGE SHON: Ms. Doroshow, the term
17 "environmental effects" is certainly a very broad one and
18 many things have been considered environmental effects in
19 the past.

20 Could you name a few of the unaccounted
21 environmental effects that might lead to an inconsistency
22 with general design criterion 31, looking at the general
23 design criterion itself and naming for me just a few of
24 the effects that you allege would interfere.

25 MS. DOROSHOW: Well, GDC-31 speaks of

1 uncertainties in determining material properties, the
2 effects of irradiation on material properties, residual
3 steady state and transient stresses and size of flaws.

4 The concern that I gather the staff has and
5 which is the basis for our concern is that there are
6 possible corrosive environments on the outer diameter
7 surface in particular which have not been taken into
8 account. For example, our knowledge of the recent buildup
9 of radiative deposits could be such a corrosive
10 environment.

11 JUDGE SHON: Could you tell me what distinction
12 you meant to draw between possible environmental corrosion
13 and active corrosion mechanisms? You seem to have thought
14 that one of these possible environmental corrosion would
15 be present at all times, as you say, even in the absence
16 of active corrosion mechanisms. It is a little hard to
17 grasp. How can you have corrosion in the absence of
18 corrosion mechanisms?

19 MS. DOROSHOW: I think that should be clarified
20 to mean or to state that even in the absence of active
21 corrosion mechanisms on the inner diameter stemming from
22 the original 1981 corrosive attack. In other words, the
23 company is saying that the original sulfur attack has been
24 stopped, that there is no further degradation and that all
25 the sulfur has been removed, the sulfur compound is

1 removed and that that is not to be a cause for further
2 concern. Even if that is true, there are still other
3 types of corrosion mechanisms that can affect the tube.

4 (Board conferring.)

5 JUDGE WOLFE: Go ahead.

6 MS. DOROSHOW: I am finished.

7 JUDGE WOLFE: Mr. Churchill.

8 MR. CHURCHILL: I don't think that has been
9 clarified for me. I don't really understand the
10 contention. The contention is somehow that whatever is
11 meant by environmental effects that the company has not
12 considered them. The citation is to a concern by the
13 staff on change request 148 at page 8. I think that was
14 the reference she gave.

15 The staff asked the company to provide a
16 justification that possible environmental effects need not
17 be considered in the proposed criteria. The response was
18 how they did the analysis and in fact they said that the
19 environmental effects were taken into consideration.

20 They used Section 11 methodology and they said
21 right in the very first paragraph there that it was
22 consistent with the requirements of GDC-31 with respect to
23 ensuring sufficient design margin throughout the
24 operational life with consideration of environment and
25 flaw sizes.

1 The data was obtained from specimens of the
2 actual material and the variables affecting the data such
3 as environmental effects were considered. They used the
4 actual material inconnel 600. The conditions of the test
5 were representative of actual operating conditions, and
6 they go on to explain about the air and water temperatures
7 and the test frequency and so on. And even the threshold
8 stress intensity factor, which they called Delta K, was
9 developed through experimentation for operating water
10 temperatures using actual TMI-1 reactor coolant chemistry
11 specifications and so on.

12 The staff asked the question and the licensee
13 responded and told how they had done it. Not only does
14 this contention not say where we have somehow failed to
15 take something into consideration, but it doesn't identify
16 what it is that we failed to do, and certainly there is no
17 basis to suggest that the staff thinks that we have failed
18 to do something. The staff asked the question and we
19 answered it. We haven't had any indication from the staff
20 that this is inadequate.

21 JUDGE WOLFE: Is that it, Mr. Churchill?

22 MR. CHURCHILL: Yes.

23 JUDGE WOLFE: Mr. Au?

24 MR. AU: I have no comment.

25 JUDGE WOLFE: Ms. Wagner, address yourself to

1 Mr. Churchill's ---

2 MS. YOUNG: I can do that.

3 JUDGE WOLFE: Oh, Ms. Young, all right.

4 MS. YOUNG: I think the pending question is
5 whether the staff was satisfied with the answer that the
6 licensee gave regarding the consideration of possible
7 environmental effects and corrosion in the steam generator
8 tubes. These type of questions are asked all along in NRC
9 licensing reviews. It is normal that the review of the
10 applicant's documentation will cause questions to arise.
11 And until the staff issues its safety evaluation, there is
12 no final conclusion made as to the appropriateness of the
13 response.

14 The basis that Ms. Doroshow has raised is
15 sufficient in the opinion of the staff to support the
16 contention. She basically paraphrased the staff's
17 question to licensee, and this is among the issues that
18 the staff will be considering in whether to grant tech
19 spec change request 148 and 153.

20 Since a prior opportunity for hearing is being
21 offered on 148 at least in terms of making its final no
22 significant hazards determination with respect to 153, the
23 staff will have to reach this determination before it can
24 issue the amendment. But the issues are pertinent to both
25 tech spec change requests. The environmental effects is a

1 pertinent inquiry and there is no resolution to date on
2 whether the licensee's response is adequate.

3 JUDGE WOLFE: Anything more, Ms. Doroshow?

4 MS. DOROSHOW: No, nothing further.

5 MR. CHURCHILL: I have got a question, but maybe
6 it is for the staff. No, I won't frame it in a question.

7 This means if the staff's position is right, as
8 Ms. Young just presented it, this means that all anybody
9 has to do is go through any pending application, look for
10 staff questions and say that just because the staff asked
11 a question and didn't yet rule on the answer because they
12 won't do it until there is an SER, that that is the basis
13 for a contention.

14 Ms. Young is quite correct. The staff asks lots
15 of questions. The staff has lots of things under
16 consideration. Unless the intervenor comes in and says
17 here is what is wrong with the applicant's answer, there
18 is something in this answer that is wrong. They have said
19 that we haven't taken into account environmental effects.
20 The answer has. The answer says we have.

21 What in the world is the contention then and
22 what is the basis for the contention? The mere fact that
23 it happens to have been a question from the staff and an
24 answer to that question just without even considering the
25 fact the contents of that cannot possibly be the basis for

1 a contention.

2 This is information. The response is
3 information provided by the applicant, by the licensee
4 about what the situation is. No, the staff doesn't rule
5 on every one of those questions. They don't do it at all
6 until the SER comes out. But this is just as if it would
7 have been submitted the first time. If the licensee had
8 known that the staff wanted more information, they could
9 easily have put it in the first time, but instead they did
10 it in response to a staff question. There it is.

11 The fact that there was a staff question,
12 independent of what is in it, can't be the basis. For the
13 basis we have got to go to the material that is there and
14 ask TMIA to tell us what is wrong with that and what is
15 the basis for your saying that whatever you say is wrong
16 with it is wrong.

17 Neither one of those have been done. There
18 literally is no contention here. We certainly can't
19 understand it and they certainly haven't told us what is
20 wrong with what we have done and why we have said here is
21 in any way inconsistent with GDC-32. We have nothing.

22 JUDGE WOLFE: A final word, Ms. Doroshow?

23 MS. DOROSHOW: Well, it seems that the basis for
24 the company's answer to the staff's question is a
25 statement on page 9 that they need not consider -- well.

1 they state the assumption of only mechanical crack growth
2 throughout operational life is supported by the chemistry
3 specifications, and what they are arguing here is that
4 there are basically no reasons and there is no evidence to
5 assume that this sort of an environment could develop,
6 this environmental corrosion.

7 This is also addressed in the company's basis
8 for supporting their conclusion that regulatory guide
9 1.121 has been complied with. The argument that the
10 company makes is that the additional thickness degradation
11 allowance for corrosion and wear is not necessary because
12 the mechanism for continued chemical attack has been
13 arrested and the TMI-1 steam generators do not have a
14 history of either tube failure by wear on the outer
15 surface.

16 Our response to that is that there are questions
17 of whether the mechanism for chemical attack on the inner
18 surface has been arrested and there are also questions
19 raised by the recent operating history of Unit 1 regarding
20 whether there are new types of corrosive attack and also
21 whether the corrosive environment could attack either the
22 primary or the secondary side.

23 That is the basis for raising the issue in
24 general design criteria 131, compliance with that general
25 design criteria, as well as the basis for challenging the

1 compliance with regulatory guide 1.121.

2 JUDGE WOLFE: All right. We will proceed with
3 Contention 5.

4 Ms. Doroshow.

5 MS. DOROSHOW: Contention 5 ---

6 MS. YOUNG: Judge Wolfe, excuse me a minute
7 before we move on to that one. I would like to just add a
8 short response to a statement made by Mr. Churchill.

9 Contention 4 states that neither licensee nor
10 the staff have demonstrated that there has been an account
11 of environmental effects on the tubes that remain
12 unplugged.

13 The staff's question to the licensee merely
14 elicited a response as to what the licensee has done. The
15 staff has not performed this analysis yet. So I would say
16 that the contention in terms of the way it is phrased
17 could only be ruled out at this point on the judgment on
18 the merits which is more proper to be laid over until
19 summary disposition.

20 So I fail to see the appropriateness of Mr.
21 Churchill's exception to the staff's position that this
22 contention does not plead in a litigable issue.

23 JUDGE SHON: I would like before we go further,
24 too, to have the staff's comment on the fact that I
25 noticed the staff's concern that was mentioned in

1 connection with this general design criterion 31 was that
2 there may be possible degradation due to environmental
3 corrosion even in the absence of evidence of active
4 mechanisms.

5 The contention came out with possible
6 environmental corrosion even in the absence of active
7 corrosion mechanisms. The two seem quite different to
8 me. You wouldn't have corrosion if you didn't have
9 corrosion mechanisms, but you might well have corrosion
10 even though you had no evidence of the corrosion
11 mechanisms.

12 Do you think that there is a flaw in the wording
13 of the contention in that way and it is an effort to
14 repeat the staff's statement but did not repeat it
15 properly?

16 MS. YOUNG: Well, I am a little confused, too,
17 because I read a phrase in the staff's question in the
18 second paragraph on page 8 which basically talks about
19 that there is a staff position to require additional
20 allowance in wall thickness to account for possible
21 degradation due to environmental corrosion even in the
22 absence of evidence of active mechanisms.

23 So Ms. Doroshow's contention is not that an
24 inaccurate a paraphrase of what the staff had to say, and
25 I am not at this moment prepared to say what was in the

1 mind of the staff reviewer who proposed this question.

2 JUDGE SHON: Ms. Doroshow, would you like to
3 address the difference between the absence of mechanisms
4 and the absence of evidence thereof?

5 MS. DOROSHOW: I think you raise a very good
6 point. I think what we were trying to do was paraphrase
7 the staff as best we could and perhaps, because we are not
8 technical experts, we may have paraphrased incorrectly.
9 But I think that there is a difference between evidence of
10 active mechanisms and actually corrosion.

11 JUDGE WOLFE: All right, Ms. Doroshow,
12 Contention 5.

13 MS. DOROSHOW: Contention 5 concerns compliance
14 with regulatory guide 1.121.

15 The basis for the contention is essentially: the
16 company's statements in TDR-690 which evaluates the
17 criteria proposed in OLA-1 against the regulatory guide
18 and TDR-758 which evaluates the criteria in OLA-2 against
19 the regulatory guide, that the additional thickness
20 degradation allowance provided in the regulatory guide for
21 corrosion and wear is not necessary because the mechanism
22 for continued chemical attack from the inner surface has
23 been arrested and the TMI-1 steam generators do not have a
24 history of either tube failure by wear on the outer
25 surface.

1 I think the operating history of TMI since
2 restart indicates that there may be a real need to take
3 into account possible additional degradation in light of
4 the build up of radioactive deposits.

5 In addition, the company acknowledged in the
6 February '85 meeting with the staff that there would be
7 regulatory degradation once the plant does operate, and I
8 think that the failure to pull and examine actual tubes is
9 imprudent and that there are factual issues raised at
10 least until that is done and some comparison can be made
11 with an actual tube before it can determined whether the
12 regulatory guide is complied with or whether or not there
13 should be some exemption from compliance with the
14 regulatory guide because I think that clearly the company
15 admits that it is not being complied with.

16 That is all.

17 JUDGE WOLFE: Mr. Churchill.

18 MR. CHURCHILL: Our response is fairly
19 straightforward. It is that regulatory guides are not
20 regulations and they are not requirements as stated in the
21 contention. We are not nit-picking here at all. This is
22 a very substantial difference.

23 The regulatory guides clearly are the guidance
24 set out by the Commission, by the Commission staff for
25 determining compliance with the regulations and the design

1 design criteria. It has been litigated and determined by
2 the Commission as well as stated within the pages of the
3 guide itself that these are only guides and there are
4 other ways to get to the ultimate conclusion of the
5 adequacy of the protection of the health and safety of the
6 public.

7 There is nothing that says that a licensee or an
8 applicant has to do exactly what the reg. guide says.
9 What the licensee has to do is convince the NRC that it
10 has a safe situation by doing something in an alternative
11 method to a portion of what the guide has said. That is
12 what the licensee has to do, and the licensee has offered
13 that opportunity.

14 The staff in fact is not required to just apply
15 slavishly each element of the regulatory guide. What the
16 licensee in this case did was explained its alternative
17 position, its reasoning and what it was doing. It is all
18 set out right in the application what it is doing.

19 Irrespective, and this is my point, irrespective
20 of whether or not something is down in a reg. guide, what
21 the licensee says he is going to do has got to be
22 adequate.

23 JUDGE SHON: Mr. Churchill, I would like to have
24 you address though why it might not be true that if one
25 accepts or selects this alternate route, that is not

1 following the reg. guide, but convincing the NRC that the
2 procedures you are using are adequate, why it should not
3 in a case of factual dispute be the NRC in the person of
4 this Board that you have to convince?

5 MR. CHURCHILL: Oh, I agree. If there was a
6 factual dispute, that is perfectly appropriate. But you
7 see what I am trying to do in reading the NRC's
8 regulations as to how a factual dispute comes before this
9 Board in the first place, and it doesn't come
10 automatically or just because somebody wants it there.
11 There are certain minimal requirements to even get the
12 factual dispute placed.

13 That again is this word basis that we are having
14 so much trouble with. I think TMIA has to say okay, GPU
15 Nuclear is saying they are doing this. We say that is
16 inadequate because. There has to be a reason why they say
17 it is inadequate and there has got to be some basis. That
18 is all I am saying.

19 If they can do that and it is before the Board,
20 yes, it is a perfectly appropriate issue. But just the
21 fact that this is different than what is specified in a
22 reg. guide is not adequate basis. They have got to show a
23 little bit of why what we have done is not right.

24 There was a Licensing Board case, and I think it
25 was Seabrook again, LBP-82.106 16NRC 1649 and 1654. It

1 said with respect to any safety issue, and this not a
2 quote, I don't have this case with me, but I am reading
3 from our brief, it should specify a regulation which the
4 applicant is allegedly not complying with -- This is not a
5 regulation. This is just a guidance for complying with
6 the regulations. -- and provide sufficient detail to
7 permit the Board to determine how the regulation is being
8 violated. Or it should allege with particularity the
9 existence and detail of a substantial safety issue in
10 which the regulations are silent.

11 In other words, are we violating either a
12 regulation or some kind of a requirement or even in
13 general are we doing something that is somehow inadequate
14 for an ultimate conclusion of health safety here? They
15 have got to show that and at least explain how.

16 That is more than just saying you have chosen an
17 alternative to a reg. guide. We are allowed to choose
18 alternatives to reg. guides. If we choose an alternative
19 and if there is a factual issue, fine, that is ripe for
20 litigation at a hearing like this, but they have to first
21 say what we have done wrong and what the basis is for them
22 saying that it is somehow inadequate and inconsistent
23 either with a regulation or requirement or the basic
24 requirement of protecting the health and safety of the
25 public.

1 They haven't done this. All they have said is
2 that we have done it different from the reg. guide, but we
3 are entitled to.

4 JUDGE WOLFE: Mr. Au?

5 MR. AU: I have no comment.

6 JUDGE WOLFE: Ms. Wagner.

7 MS. WAGNER: The staff doesn't read Contention 5
8 as alleging that the licensee or the staff haven't shown
9 that the proposed criteria would not meet reg. guide
10 1.121, which seems to be the thrust of licensee's
11 argument.

12 Rather, we read it as saying that it hasn't been
13 shown that the proposed plugging criteria is consistent
14 with the reg. guide. It is true a reg. guide is not -- it
15 is guidance. It is generally an acceptable way of doing
16 things. It may be that there are other ways of showing
17 consistency with the reg. guide other than meeting the
18 reg. guide. I don't have any problem with the
19 admissibility of this contention.

20 JUDGE WOLFE: Do you think it could be better
21 clarified then, Ms. Wagner, as to what the true intent of
22 TMIA is?

23 MS. WAGNER: I think clarification would be
24 helpful. I would prefer to have a better understanding
25 myself of the differences in intent between TMIA's

1 Contention 4 and Contention 5, which I think look quite
2 similar. But I don't believe that as worded it is not
3 minimally sufficient.

4 JUDGE SHON: You are sort of, as I understand
5 it, interpreting the phrase "is consistent with" as
6 meaning is equivalent to or gives equivalent safety
7 protection to the reg. guide; is that right?

8 MS. WAGNER: That is correct. I think if the
9 contention were that it doesn't meet the reg. guide, that
10 it is inconsistent with the reg. guide or it doesn't meet
11 what is set forth in the reg. guide, then I think
12 licensee's argument that a reg. guide is not a mandatory
13 regulatory requirement might have some merit. But I don't
14 read TMIA to be making that allegation. Clarification
15 would be helpful.

16 MS. DOROSHOW: I think the intention of the
17 contention was that in fact regulatory guide 1.121, the
18 provision in that regulatory guide which requires an
19 additional thickness degradation allowance has not been
20 complied with. So I think that the intent of the
21 contention is to say that the proposed criteria would
22 violate that regulatory guide.

23 It was not intended simply to raise the issue of
24 whether there is some alternative method the company can
25 use in order to give equivalent safety protection to the

1 regulatory guide. It is directed specifically at the
2 additional thickness degradation allowance.

3 JUDGE SHON: And as I understand Mr. Churchill's
4 argument, it is essentially one of demur. He says that is
5 right, we don't meet that particular thing, but we are not
6 required to. We have other things that we are doing that
7 take care of everything that that was intended to take
8 care of; is that right?

9 MR. CHURCHILL: Yes, sir.

10 MS. DOROSHOW: Well, the response is that this
11 has not been demonstrated and that there are factual
12 issues which certainly are raised ---

13 JUDGE WOLFE: What has not been demonstrated?

14 MS. DOROSHOW: That even if the regulatory guide
15 is not considered a regulatory requirement, that the
16 equivalent safety protection which the company argues has
17 been provided has not been demonstrated, or the arguments
18 that the company is making to demonstrate that the safety
19 protection, the equivalent safety protection has been
20 provided has not been demonstrated and there are factual
21 issues as to whether that has been done.

22 MS. WAGNER: There is maybe an obvious point
23 here that hasn't, I don't think, been mentioned by
24 anybody, but reg. guides are designed to assist or ensure
25 compliance with a regulatory requirement.

1 Is there a regulation that you can point to in
2 connection with this contention? Are you referring to GDC-
3 31?

4 MS. DOROSHOW: My understanding of the
5 regulatory guide itself is to ensure compliance with GDC-
6 14.31 and 15.

7 (Board conferring.)

8 JUDGE SHON: Ms. Doroshow, you seem to have said
9 two different things in your last speech. At first you
10 seemed to say quite clearly that your only allegation was
11 that the degradation allowance requirement of reg. guide
12 1.121 was not being complied with. That, Mr. Churchill's
13 argument answers by saying yes, but that degradation
14 allowance requirement is not a regulation.

15 And then after that you seemed to be saying
16 well, you haven't done the equivalent under some
17 regulation or other. Which of the two are you now
18 arguing, that it is just the guide that isn't complied
19 with?

20 MS. DOROSHOW: I guess the basis of the argument
21 is that the degradation allowance requirement or guideline
22 was placed in the regulatory guide because the NRC made a
23 determination that this was necessary in order for the
24 regulations to be complied with in the general design
25 criteria.

1 JUDGE SHON: I think more subtly it was placed
2 in the guide because the staff made a determination that
3 by allowing that degradation allowance one could be sure
4 that in some measure or in some fashion the regulation was
5 complied with, understanding that there might be other
6 ways of complying with that regulation also as the
7 disclaimer on the front of each reg. guide says.

8 MS. DOROSHOW: I guess this really is sort of a
9 legal distinction, and if that is how the Board views the
10 effect of the regulatory guide, then the contention would
11 have to be understood to raise the issue that there has
12 been no equivalent safety protection provided by the
13 company, that it is a factual issue and that even if they
14 have not complied with the degradation allowance, then
15 they have not demonstrated another mechanism or means in
16 which the purpose of the regulatory guide can be complied
17 with understanding that proviso.

18 (Board conferring.)

19 JUDGE SHON: Would you then say that your
20 contention actually is that neither the licensee nor the
21 NRC staff has demonstrated that allowing degraded tubes to
22 remain in service under the proposed plugging criteria
23 would give equivalent safety protection to that afforded
24 by the operational degradation allowance set forth in reg.
25 guide 1.121?

1 MS. DOROSHOW: Yes, I think that would be
2 satisfactory.

3 JUDGE SHON: What does the staff think of that
4 reading of the contention?

5 MS. WAGNER: The staff would prefer to see a
6 reference to a regulation. I would prefer to see
7 something like -- after the contention states consistent
8 with reg. guide 1.121 something along the lines of so as
9 to meet GDCs 14, 31 and whatever else it was that Ms.
10 Doroshow had stated earlier.

11 JUDGE SHON: That would be fine.

12 MS. WAGNER: That would be preferable in terms
13 of clarify.

14 JUDGE SHON: You could append to that thus, the
15 plant as operated as proposed would not meet GDCs 14, 15
16 and 31. Those were the ones you mentioned and I think
17 they are the ones set forth in reg. guide 1.121. In other
18 words, it says that these are the ways you meet GDCs 14,
19 15 and 32 I think.

20 MS. DOROSHOW: Thirty-one.

21 JUDGE SHON: I am looking at the guide here and
22 it mentions 32.

23 MS. WAGNER: We are talking about a contention
24 that would included the language you propose plus ---

25 JUDGE SHON: Well, we are talking about a

1 contention that would include the language I have proposed
2 and would then say thus, the following general design
3 criteria will not be met.

4 MS. WAGNER: May we have a moment to confer with
5 the staff technical expert?

6 JUDGE SHON: Sure.

7 MR. CHURCHILL: May I comment?

8 JUDGE SHON: Surely.

9 MR. CHURCHILL: I don't want to interrupt.
10 Should I wait?

11 JUDGE SHON: Why don't you wait so they can hear
12 what you have to say.

13 (Pause.)

14 MS. WAGNER: Judge Wolfe, are you waiting to
15 hear from us ---

16 JUDGE WOLFE: Yes.

17 MS. WAGNER: --- because I do have something
18 further to say. All right.

19 We have some problem with the words "equivalent
20 safety protection," as Judge Shon had stated earlier or
21 proposed earlier, in that the contention is only singling
22 out a certain one of the requirements of reg. guide 1.121
23 or guidelines in 1.121.

24 I think we don't have trouble if the whole reg.
25 guide is looked at, but when you start saying that there

1 would have to be equivalent safety protection to one
2 particular guideline, that might give the staff a
3 problem. There might be other ways of meeting the reg.
4 guide rather than something equivalent to that one
5 particular element that is being singled out in this
6 contention.

7 JUDGE SHON: Well, let's try once more. We will
8 start with again the language "Neither the licensee nor
9 the staff has demonstrated that allowing degraded tubes to
10 remain in service under the proposed revised plugging
11 criteria would afford equivalent protection for safety, or
12 would afford protection for safety equivalent to that of
13 regulatory guide 1.121," and then stop it there?

14 MS. WAGNER: Or continue with a comma and then
15 say so as to meet GDCs 14, 31 and ---

16 JUDGE SHON: 14, 15 and 31 I think. Okay.

17 MS. WAGNER: That is of course a change in
18 TMIA's contention in that it broadens it, but that does
19 not present the problem that we had with the earlier
20 suggested phrasing. That is not to say that we are
21 waiving an objection to a broadening of the contention at
22 this time.

23 Am I making myself at all clear?

24 JUDGE SHON: No.

25 MS. WAGNER: All right. The problem we had with

1 the word "equivalent" is certainly solved by the way that
2 Judge Shon has just proposed to change Contention 5.
3 However, this new language presents a broader contention
4 than was proposed by TMIA.

5 JUDGE WOLFE: So Ms. Doroshow now will be -- she
6 may well find -- well, I was trying to figure this out.
7 She would move to amend, and I take it she would, or is it
8 a motion to clarify?

9 I haven't heard from you, Ms. Doroshow, of what
10 do you want to do, and if so, how should we deem what you
11 wish to do? Shall we deem it to be a clarification of
12 your original contention and explain why, or is it an
13 amendment?

14 MS. DOROSHOW: Well, I think that it clearly
15 does broaden the contention to remove reference to the
16 degradation allowance issue, which was the focus of our
17 contention. I mean it appears what the staff is saying is
18 that they would defend, or they may defend against this
19 contention by demonstrating that there are additional ways
20 of providing equivalent safety protection other than
21 compliance with the degradation allowance.

22 I suppose no matter how the contention or phrase
23 that would be the issue which would be litigated and
24 whether there are other equivalent sorts of safety
25 protections which can be imposed in order to remove the

1 problem that they have not satisfied the degradation
2 allowance criteria in the regulatory guide ---

3 JUDGE WOLFE: Well, was that what you intended
4 when you wrote the contention and when you used the words
5 "inconsistent with regulatory guide 1.121?

6 MS. DOROSHOW: Well, when the contention was
7 written I think there was an intent to raise the problem
8 that the provision in the regulatory guide was not
9 complied with, but under the circumstances that the agency
10 takes the position that a regulatory guide can be -- that
11 the purposes of the regulatory can be complied with in
12 ways other than the specific criteria listed in that
13 guide, then under those circumstances the revision of the
14 contention in this way would I think be satisfactory.

15 JUDGE WOLFE: It would be what?

16 MS. DOROSHOW: It would be satisfactory to
17 broaden it.

18 JUDGE SHON: Well, it would seem to me that we
19 could easily renarrow it also. If the contention, and
20 again I am going to propose some language that I am sure
21 the court reporter will put down. I will start out with
22 the same phraseology that you started out with: Neither
23 the licensee nor the NRC staff have demonstrated that
24 allowing degraded tubes to remain in service under the
25 proposed revised plugging criteria will give safety

1 protection equivalent to reg. guide 1.121 since the new
2 criteria do not provide for a proper degradation
3 allowance. Thus, the new criteria will not meet general
4 design criteria 14, 15 and 31.

5 That leaves it as narrow as it was. It says I
6 think that it doesn't give equivalent safety protection to
7 the reg. guide and specifically names regulations that it
8 alleges will not be met. So I think it takes care of the
9 objections of just about everybody except perhaps Mr.
10 Churchill.

11 MR. CHURCHILL: I guess I would like to get into
12 the foray here. It is kind of like putting the cart
13 before the horse, but I hope all this time spent on the
14 wording of the contention doesn't portend badly on the
15 ruling of whether the contention is in or out.

16 I have trouble with saying that it is equivalent
17 to reg. guide 1.121. There isn't a requirement that
18 something has to be equivalent to a reg. guide. There is
19 a requirement that the GDC and other Commission
20 requirements be met.

21 If you focus on whether one way of doing things
22 is exactly equivalent to another way of doing things, then
23 you get into the situation is one way of doing things
24 going to give you more margin than you need, and if you
25 come away with a second alternative, which maybe has less

1 margin or even more margin, as long as it is well within
2 the margin of meeting the requirements, it doesn't really
3 have to be equivalent.

4 I think we can waste a lot of time and resources
5 just arguing equivalency. Would you mind if I proposed
6 yet a third?

7 JUDGE SHON: I would be delighted. This is
8 exactly the kind of thing I sought to avoid when I said
9 earlier in this meeting that we were a little reluctant to
10 try to rephrase contentions.

11 MR. CHURCHILL: Well, I will just go to the book
12 itself. If we start out the way that TMIA started out
13 their earlier contentions, if you, for example, go to
14 Contention 1, neither the licensee nor the NRC staff have
15 demonstrated that allowing the degraded tubes to remain in
16 service under the proposed revised plugging criteria --
17 now so far that is identical to their Contention 5 -- but
18 then insert picking up from Contention 1, will provide
19 reasonable assurance that TMI can operate without
20 endangering the public health and safety in that the
21 criteria do not take into account variations in tube
22 thickness due to possible corrosion as stated in reg.
23 guide 1.121.

24 What that does is it says our objection is you
25 don't have a corrosion allowance, and we note that it is

1 stated in 1.121. Now the object isn't to demonstrate any
2 kind of equivalency or anything else. It is just to day
3 that that is inadequate for the protection of the health
4 and safety of the public.

5 The one thing I forgot in that though was your
6 reference to the general design criteria.

7 JUDGE SHON: The staff was anxious to have that
8 in I think.

9 MR. CHURCHILL: If we are going to have that, I
10 would like to have the particular criterion that this
11 really goes to, if anybody knows.

12 Mary, do you think we need it?

13 MS. WAGNER: I would like to see it there, yes.

14 MR. CHURCHILL: Okay. Let's figure out which
15 one it is.

16 Ms. Doroshow, we will have your contention for
17 you in a minute.

18 (Laughter.)

19 MS. DOROSHOW: I don't like it, to tell you the
20 truth. I liked the other version better.

21 MR. CHURCHILL: Oh, well. That was only a
22 proposal.

23 MS. WAGNER: Does anyone have a copy of the reg.
24 guide?

25 MS. DOROSHOW: Yes.

1 MS. WAGNER: Could we take a look at it.

2 JUDGE WOLFE: There you go.

3 (A document was handed to Ms. Wager by Judge
4 Wolfe.)

5 MR. CHURCHILL: Ms. Doroshow, would you like it
6 better without the reference to the general design
7 criteria?

8 MS. DOROSHOW: No. I think that the focus has
9 got to be the regulatory guide and the general design
10 criteria and not a broad assertion that the public health
11 and safety is not protected, because this goes to specific
12 criteria which the NRC has already determined to be
13 necessary, meaning at least the general design criteria,
14 and the guide has been promulgated to enforce those
15 criteria, and I think that that is the purpose of this
16 contention.

17 MR. CHURCHILL: Well, you could say that -- see,
18 right now your only allegation is that it is inconsistent
19 with a certain document, a guidance document. It doesn't
20 say anything about whether that is good or bad.

21 MS. DOROSHOW: The premise is that these
22 criteria and the guide were issued after a consideration
23 by the staff as to what they believed were necessary to
24 ensure that the purposes of the Atomic Energy Act were met
25 or the regulations. I think there is a certain assumption

1 that these criteria and the regulatory guide is based
2 already on some fairly well discussed criteria which the
3 staff and the agency has decided are important, and I
4 think that needs to be the focus of this contention.

5 MR. CHURCHILL: What about this. Take your
6 contention exactly as written, but instead of the word
7 "requires" insert the words "which provides guidance that
8 plugging criteria should" -- or not even the "should" --
9 "which provides guidance that plugging criteria take into
10 account." Would that do it? See, it is just technically
11 wrong right now. The word "requires" just has to go
12 because it doesn't require it. We could beat that in one
13 sentence.

14 MS. DOROSHOW: I actually prefer language which
15 mentions equivalent safety -- let's see, the way that
16 Judge Shon was saying.

17 (Board conferring.)

18 JUDGE WOLFE: Ms. Reporter, would you read back
19 what Judge Shon said.

20 (The requested portion of the transcript was
21 read by the reporter.)

22 JUDGE SHON: I might say I have checked general
23 design criteria 14, 15 and 31 and they seem to me at least
24 to fit reasonably in with this. I will leave that to
25 other people to take a quick look at. Criterion 14

1 requires that you have a low probability of abnormal
2 leakage of rapidly propagating failure and of gross
3 rupture, and I suppose these are the sorts of things that
4 you might expect if you didn't have a proper allowance for
5 degradation.

6 Criterion 15 says it so that the integrity will
7 be maintained with sufficient margin to assure that design
8 conditions of the reactor coolant pressure boundary are
9 not exceeded in any condition of normal operation,
10 including anticipated operation occurrences.

11 Criterion 31 is a little bit more complicated,
12 but it again forbids such things like brittle rupture and
13 I imagine you are aimed at that, too, is that not correct?

14 MS. DOROSHOW: Right, that is correct.

15 JUDGE SHON: I don't know if there are other
16 criteria that might also be thrown into this pot, but
17 surely those three apply.

18 (Board conferring.)

19 JUDGE WOLFE: All right, in an effort to assist
20 TMIA Judge Shon has made an effort to amend TMIA
21 Contention 5. Judge Shon agrees that this was merely in
22 an effort to assist TMIA and it doesn't forebode what our
23 ruling ultimately will be on the admissibility of the
24 contention.

25 But I take it you so move for leave to amend

1 Contention 5 to read as Judge Shon has made a good faith
2 effort to clarify and to amend; is that right?

3 MS. DOROSHOW: That is correct.

4 JUDGE WOLFE: Now we have an outstanding motion
5 to amend.

6 Ms. Wagner?

7 MS. WAGNER: I am very reluctant to propose yet
8 another way of wording such an amendment, but I have a
9 strong preference for words other than the ones that have
10 been proposed. So I would oppose TMIA's motion to amend
11 along the lines just stated. I think it is a dramatic
12 deviation from her original contention and I do have, and
13 I don't know if this is an appropriate time, but I do have
14 about five or six words with which I would propose to
15 modify her Contention 5 as submitted which I think would
16 satisfy the staff's concerns.

17 Perhaps it would be appropriate to take a short
18 break and discuss this with counsel for TMIA and licensee.

19 JUDGE WOLFE: All right. We will have our late
20 lunch period beginning now. It is now 12 minutes of i.
21 Supposing we meet back here at 2 o'clock. At that time
22 hopefully there will be some agreement on this amendment
23 and we will consider whether there is any opposition to
24 it.

25 Then the Board will recess and consider the

1 admissibility of the contentions and rule orally.

2 JUDGE SHON: I would like to say one thing. I
3 think the Board recognizes that Mr. Churchill's objection
4 as to basis is entirely apart to the matter of amend; is
5 that not correct?

6 MR. CHURCHILL: Yes, sir.

7 (Whereupon, at 12:50 p.m., the special
8 prehearing conference recessed, to reconvene at 2:00
9 o'clock p.m., the same day.)

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AFTERNOON SESSION

(2:00 p.m.)

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3 JUDGE WOLFE: All right. I understand that the
4 parties have conferred and that reserving any arguments
5 that they may have against the reworded TMIA Contention 5
6 that they have arrived at this revised wording.

7 Ms. Wager, would you read into the record what
8 this agreed wording is now?

9 MR. CHURCHILL: Slowly, please, Ms. Wagner.

10 MS. WAGNER: Yes. And it begins the same way.
11 We have tried to make as few changes as possible in the
12 existing language.

13 Neither the licensee nor the NRC staff have
14 demonstrated that allowing degraded tubes to remain in
15 service under the proposed revised plugging criteria will
16 meet GDCs 14, 15 and 31 in that it is inconsistent with
17 reg. guide 1.121, which provides that plugging criteria
18 take into account variations in tube thickness due to
19 possible corrosion.

20 (Board conferring.)

21 JUDGE SHON: I gather that the chief differences
22 in this from what it was originally is that the chief two
23 differences is that it mentions the general design
24 criteria specifically and that it uses the word "provides"
25 instead of "requires." Is that right?

1 MS. WAGNER: That is correct.

2 JUDGE PARIS: Ms. Wagner, since we are going to
3 deliberate on this before the afternoon is over, could you
4 go through it once again and make sure we have the precise
5 wording down?

6 MS. WAGNER: Certainly.

7 JUDGE PARIS: Thank you.

8 MS. WAGNER: Neither the licensee nor the NRC
9 staff have demonstrated that allowing degraded tubes to
10 remain in service under the proposed revised plugging
11 criteria -- and up to that point it is identical to the
12 original proposed contention -- will meet GDCs 14, 15 and
13 31 in that it is inconsistent with reg. guide 1.121, which
14 provides that plugging criteria take into account
15 variations in tube thickness due to possible corrosion.

16 (Board conferring.)

17 JUDGE SHON: I noticed that you have retained
18 the verb "have" to agree with licensee and staff, a matter
19 that the staff seemed to have some reservations about in
20 its original reply.

21 MS. WAGNER: I wanted to make as few changes as
22 possible.

23 (Laughter.)

24 It is up to TMIA. It is their contention.

25 JUDGE SHON: I think the usage of using either a

1 company or a group as plural is a British usage, is it
2 not, her Majesty's government have determined and such?

3 (Laughter.)

4 MR. CHURCHILL: I still object to the
5 contention.

6 (Laughter.)

7 JUDGE WOLFE: All right. Now I take it Ms.
8 Doroshow moves for leave to reword TMIA Contention 5?

9 MS. DOROSHOW: That is correct.

10 JUDGE WOLFE: Any objection, Ms. Wager, now?

11 MS. WAGNER: No objection.

12 JUDGE WOLFE: Mr. Churchill, just as to the
13 rewording.

14 MR. CHURCHILL: Of her proposed contention I
15 don't object.

16 MR. AU: I have no objection.

17 JUDGE WOLFE: All right. We have completed now
18 the oral argument on the proposed contentions. We have
19 during the noon our lunchtime recess looked at our notes
20 and considered the arguments of the parties with respect
21 to proposed contentions 1 through 4 in both OLA-1 and OLA-
22 2, and we have come to determinations as to those four.

23 (Board conferring.)

24 As I say, we have discussed the first four
25 proposed contentions. Everyone just stand by, and we will

1 have a short recess while the Board discusses this
2 reworded proposed Contention 5. Then, as I have stated
3 before, we will rule up or down on the proposed
4 contentions and give our reasons afterwards in a written
5 order. This is intended to expedite this case and to do
6 justice at the same time.

7 All right, we will have a short recess. If
8 everyone will stand in place, we should be able to get
9 back to you in a few minutes.

10 (Short recess.)

11 JUDGE WOLFE: As I stated before, the Board will
12 read off its rulings admitting or rejecting various
13 contentions, and hereafter we will enter an order giving
14 our reasons.

15 With respect to TMIA proposed Contention 1, it
16 is admitted.

17 With respect to TMIA proposed Contention 2 as
18 clarified, it is admitted.

19 TMIA proposed Contention 3 is rejected.

20 TMIA proposed Contention 4 is rejected, and I
21 think so that you will immediately be aware of the Board's
22 thought on this, we rejected it since we conclude that it
23 is actually subsumed under TMIA proposed Contention 1,
24 which we have admitted.

25 TMIA proposed Contention 5 as reworded is

1 admitted.

2 We have outstanding TMIA's motion to broaden the
3 hearing scope.

4 MR. CHURCHILL: Your Honor, excuse me. While we
5 are still on the rulings of the contentions, just for the
6 record, I take it they are admitted for both OLA-1 and OLA-
7 2?

8 JUDGE WOLFE: That is correct.

9 The licensee and staff, do you now oppose TMIA's
10 motion in substance to consolidate the two cases?

11 Ms. Wager?

12 MS. WAGNER: No. The staff supports
13 consolidation with the proviso that it doesn't
14 significantly delay ultimate licensing action on 148, but
15 I would assume that if that point is reached at a later
16 stage the cases could be separated.

17 MR. CHURCHILL: Your Honor, just to make sure
18 that we are both on the same wave length, by consolidation
19 you are really talking about a practical combining of the
20 two. They still would be two independent proceedings with
21 two independent docket numbers.

22 JUDGE WOLFE: Oh, yes.

23 MR. CHURCHILL: And we will have two independent
24 initial decisions, or at least an initial decision that
25 rules on each docket number separately. I don't want to

1 lose the distinction between the two proceedings by not
2 understanding completely the word "consolidation."

3 One isn't going to be merged in the other. We
4 are talking just for practicality considering the issues
5 together, and I think that makes sense.

6 JUDGE WOLFE: That is right, yes. And actually
7 if there is no objection and we understand that, the Board
8 also believes that for the moment the motion to
9 consolidate should be granted at this time for only an
10 interim period, namely, through the completion of
11 discovery, because the Board doesn't know whether there
12 may or may not be other petitions for leave to intervene
13 in 153.

14 But if there is no objection, we will treat
15 these as being two separate cases, and we are merely
16 consolidating for purposes of economy and expedition. We
17 will be issuing either two separate initial decisions or
18 initial decisions that once again will be in one decision,
19 one final decision.

20 But I think for now we will just consolidate
21 through the discovery period and see how we are going. If
22 there are no other petitions for leave to intervene, then
23 the motion to consolidate is made final for the entire
24 proceeding.

25 So at this time the Board will set discovery

1 time.

2 MS. WAGNER: Judge Wolfe?

3 JUDGE WOLFE: Yes.

4 MS. WAGNER: Could I get a clarification on your
5 ruling in terms of the captioning of our pleadings now?

6 MS. WAGNER: Yes.

7 MS. WAGNER: Will we be having one caption in
8 OLA-1 and OLA-2 or will we be filing pleadings with
9 separate captions?

10 JUDGE WOLFE: I think once again for purposes of
11 economy and a blizzard of paperwork and all this sort of
12 thing that having your caption as both OLA-1 and OLA-2
13 just in the caption, and if it has something that is
14 really particularized to the 50 percent throughwall cases
15 against the 70 percent, somehow or another in your
16 introduction to whatever submission you are making you can
17 make that clear so people don't have to read through the
18 entire thing to know what one it applies to or if it
19 applies to both. We will let you handle that one.

20 With respect to discovery time now would the
21 parties turn to Section 2.740b. That refers to
22 interrogatories to parties. The Board is of the mind that
23 there now only being three contentions in each case which
24 are identical that the full time for response to
25 interrogatories and actually for response to production of

1 documents under 2.741 should be reduced.

2 So looking at 2.740b, Interrogatories, the
3 response instead of being due within 14 days shall be due
4 within 10 days.

5 With respect to 2.741, Production of Documents,
6 the response is due within 30 days, and that is shortened
7 to 20 days.

8 So that now discovery shall begin tomorrow and
9 the parties have 45 days within which to complete
10 discovery.

11 (Board conferring.)

12 MS. WAGNER: Could I be heard on the 10-day
13 turnaround for interrogatories?

14 JUDGE WOLFE: Sure.

15 MS. WAGNER: We have in our office, the legal
16 staff, we have a long concurrence chain that we have to go
17 through before any pleading can go out and that takes up
18 several days of our response time. We also of course in
19 this kind of a situation have to work with the technical
20 staff and they have a concurrence chain as well.

21 Ten days is very difficult for us.

22 JUDGE WOLFE: It is difficult for everyone, but
23 we are trying to get this case cracking. It is impossible
24 to meet, is that what you are saying?

25 MS. WAGNER: No, I am not saying that. It may

1 prove on occasion impossible to meet. I also wanted to
2 say that we would certainly make every attempt to meet. I
3 don't want to give you the wrong impression. But I had
4 discussed with counsel for licensee a proposed schedule,
5 and in fact he had mentioned it to me, a proposed schedule
6 for discovery that was perhaps a little longer than your
7 suggestion.

8 So I am just wondering if we could get you to
9 reconsider the 10-day turnaround?

10 JUDGE WOLFE: Well, one was 10 and one was 20.

11 MS. WAGNER: I think the 20-day document
12 production doesn't give us the same problem I think in
13 terms of getting the necessary clearance to get it out of
14 our office.

15 JUDGE WOLFE: How about the 45 days for
16 completion of discovery?

17 MS. WAGNER: I think we could live with that as
18 well. It is more the 10-day period on interrogatories.

19 JUDGE WOLFE: As against 14?

20 MS. WAGNER: That is correct.

21 JUDGE WOLFE: Any input from the other parties?

22 MR. CHURCHILL: The 10 days, if the
23 interrogatories are mailed, then the date for response
24 would be 10 days plus 5 days for mailing. Of course, it
25 might take the 5 days for mailing.

1 If we were to say that interrogatories should be
2 hand served, let's see, what would that do? Supposing we
3 said that interrogatories would be hand served and then
4 add a day or two to the 10 days. Would that be helpful?

5 MS. WAGNER: Anything would help.

6 MR. CHURCHILL: Then it would kind of be
7 equivalent so that it would be easier to deal with within
8 the 45 days if the staff has a problem with the 10-day
9 response time.

10 MS. DOROSHOW: I don't know that as far as TMIA
11 is concerned that hand delivery is going to be possible.
12 I am not sure where most of my time is going to be,
13 whether it is going to be in Harrisburg or Washington.

14 But I should also notify the parties and the
15 Board that I don't know how long I personally am going to
16 be involved in this case, and that it could very well be
17 that a TMIA member who is not an attorney will sometime
18 during the discovery period have to take the case over. I
19 don't know who that is going to be, but I can guarantee it
20 will be somebody in the Harrisburg area.

21 In addition, in light of that fact and the fact
22 that at this point we do not have any experts with whom we
23 are consulting, and basically our case is based entirely
24 at this point on licensee and NRC documents, and that in
25 light of the fact that it also could very well be that

1 very soon a non-attorney will be taking this case over for
2 TMIA that I would favor proceeding as informally as
3 possible in discovery, meaning that if there are going to
4 be these very strict time limitations that possibly we can
5 make arrangements, meaning the parties, to in a more
6 informal fashion discuss, at least as far as TMIA is
7 concerned, the basis for the contentions and the basis for
8 the case as they see it.

9 I think that it could very well be that
10 interrogatories which with a 10-day turnaround time in
11 particular is going to be very burdensome on TMIA,
12 especially if there is not a lawyer involved, and that it
13 may be in everybody's interest to just approach this whole
14 process a little bit more informally.

15 JUDGE WOLFE: Anything, Mr. Au?

16 MR. AU: No, I have no comment.

17 JUDGE WOLFE: All right. The Board reconsiders,
18 and I think in light of what Ms. Wager and Ms. Doroshow
19 have said that perhaps the full 14 days for response to
20 written interrogatories should be allowed. However, we
21 stick to the 20 days for production of documents and the
22 45 days for the completion of discovery.

23 Further, I think Ms. Doroshow's suggestion is
24 well taken, and such a suggestion is always well taken
25 because that is how the Board feels about it. There are

1 obviously things that adversary parties have to contest,
2 but at the same time you can get a lot of rubbish out of
3 the way and/or a lot of solid foundation upon matters that
4 really should not and you know darn well should not be
5 disagreed upon and there is no reason why you can't
6 expedite discovery.

7 So in light of Ms. Doroshow's bring it to mind,
8 the Board directs that the parties informally engage in
9 discovery and attempt to expedite these matters as quickly
10 as possible. The parties should meet and confer either in
11 person or via telephone.

12 One additional directive then. The discovery
13 period ends May 12, 1986. Any party wishing to move for
14 summary disposition shall advise the Board and the other
15 parties, notify the Board and the other parties within
16 seven days of after completion of discovery that they are
17 planning to file a motion for summary disposition, and
18 such motion for summary disposition shall be filed by May
19 27.

20 MS. WAGNER: Judge Wolfe?

21 JUDGE WOLFE: Yes.

22 MS. WAGNER: Another point of clarification. By
23 the 45-day discovery period, do you mean we have 45 days --

24 - JUDGE WOLFE: Beginning tomorrow.

25 MS. WAGNER: --- to file requests?

1 JUDGE WOLFE: To complete.

2 MS. WAGNER: To complete answers as well?

3 JUDGE WOLFE: Everything. Now I am not going to
4 tell you your business. You are lawyers. If you come up
5 against the wall and you need an extension of time, timely
6 file it. But, as I say, we are moving forward on this
7 case and 45 days is it. Give a good cause and you will
8 give a few more days for completion of discovery.

9 MS. WAGNER: I am not suggesting we need it.

10 JUDGE WOLFE: And I am not suggesting that you
11 are going to get it either.

12 (Laughter.)

13 So that is with respect then to summary
14 disposition. Any problem with 14 days after discovery is
15 completed to file motions for summary disposition to a
16 shorter time? I will hear argument on that.

17 (No response.)

18 Well, if it proves an impossibility for whatever
19 reason, give a good cause and move for an extension of
20 time on that, too, for a couple of days, or a few days I
21 should say.

22 All right, anything else before we conclude
23 this?

24 MS. DOROSHOW: Judge Wolfe?

25 JUDGE WOLFE: I might add, if no one notifies

1 the Board that by May 19th that a motion for summary
2 disposition is being filed, then the Board will proceed to
3 issue an order setting a date, time and place for the
4 hearing itself.

5 Any other matters to discuss?

6 MS. DOROSHOW: Judge Wolfe, maybe I missed
7 something. Did you indicate a response time for the
8 summary disposition motion?

9 JUDGE WOLFE: That is governed by the rule
10 itself.

11 Any other problems?

12 (No response.)

13 All right, the conference is concluded.

14 (Whereupon, the special prehearing conference
15 concluded at 2:35 p.m.)

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CERTIFICATE OF OFFICIAL REPORTER

This is to certify that the attached proceedings before the UNITED STATES NUCLEAR REGULATORY COMMISSION in the matter of:

NAME OF PROCEEDING: METROPOLITAN EDISON COMPANY, et al.
(Three Mile Island Nuclear Station, Unit No. 1)

DOCKET NO.: 50-289 OLA (Steam Generator Plugging Criteria)

PLACE: HARRISBURG, PENNSYLVANIA

DATE: THURSDAY, MARCH 27, 1986

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

(sig) _____

(TYPED)

Official Reporter

Reporter's Affiliation