

ORIGINAL

UNITED STATES NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF:

DOCKET NO: STN 50-498 OL
STN 50-499 OL

HOUSTON LIGHTING & POWER COMPANY,
et al.

(South Texas Project, Units 1 and 2)

EVIDENTIARY HEARING

LOCATION: HOUSTON, TEXAS

PAGES: 15583 - 15710

DATE: FRIDAY, DECEMBER 6, 1985

TR-01
0/1

ACE-FEDERAL REPORTERS, INC.

Official Reporters
444 North Capitol Street
Washington, D.C. 20001
(202) 347-3700

8512110284 851206
PDR ADOCK 05000498
T PDR

NATIONWIDE COVERAGE

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION
3 BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

4 -----X
5 In the Matter of : DOCKET NO.
6 HOUSTON LIGHTING AND POWER : STN-50-498-OL
7 COMPANY, ET AL., : STN-50-499-OL
8 (South Texas Project Units 1 & 2) :
9 -----X

10 AstroVillage Hotel

11 Forum Number 5

12 Houston, Texas

13
14
15 Friday, 6 December 1985
16

17 The hearing in the above-entitled matter was
18 convened, pursuant to adjournment, at 8:30 a.m.,

19 BEFORE:

20 JUDGE CHARLES BECHOEFFER, Chairman,
21 Atomic Safety and Licensing Board.

22 JUDGE JAMES C. LAMB, Member,
23 Atomic Safety and Licensing Board.
24
25

1 JUDGE FREDERICK J. SHON, Member,
2 Atomic Safety and Licensing Board.
3

4 APPEARANCES:

5 On behalf of the Applicants:

6 MAURICE AXELRAD, Esq.,

7 JACK R. NEWMAN, Esq.,

8 ALVIN GUTTERMAN, Esq.,

9 Newman & Holtzinger,

10 Washington, D.C.
11
12

13 On behalf of the Nuclear Regulatory Commission Staff:

14 ORESTE RUSS PIRFO, Esq.,

15 WILLIAM L. BROWN, Esq.

16 ROBERT G. PERLIS, Esq.

17 Office of the Executive Legal Director
18
19

20 On behalf of the Intervenor:

21 LANNY ALAN SINKIN, Esq.

22 1324 North Capitol Street

23 Washington, D.C. 20002

24 Counsel for Citizens Concerned About

25 Nuclear Power.

CONTENTS

WITNESSES: DIRECT CROSS BOARD REDIRECT RECROSS

GEORGE OPREA 15588 15596 15620 15635 15636

15606 15640 15641

DAVID G. BARKER 15643 15650 15686

15681

JAMES. L. SUMPTER 15695 15699 15705 15707

15703

EXHIBITS: For Id. In Evd.

Applicants Ex. 85 15644 15866

Applicants Ex. 86 15696

P R O C E E D I N G S

JUDGE BECHHOEFER: Good morning, ladies and gentlemen. Are there preliminary matters before we begin the testimony of Mr. Oprea?

MR. SINKIN: I have one brief preliminary matter, Mr. Chairman. In reading through the Applicants' findings, reply findings, I noted that they referred to one of our findings and particularly to two exhibits that we had cited which were I&E reports which they said did not contain the information which we asserted they do contain.

I've done a little bit of research on that and apparently what we are dealing with are two I&E reports that have the same numbers, and I&E reports that were in evidence at Phase I which I thought were in evidence, but what are not in fact in evidence, that were cited in our findings to those I&E reports are therefore in error in the sense that they're not exhibits. We will be trying to deal with that problem over the next few weeks in terms of perhaps a motion to reopen the record and showing you what the I&E reports were that we thought were in the record but I just wanted to alert you that that's what the Applicants' finding results from.

JUDGE SHON: You say the I&E reports have the same number?

MR. SINKIN: Apparently, it was a procedure

1 whereby the I&E reports I was looking at were sent to Brown
2 & Root, not to HL&P and, for some reason, had the same I&E
3 number, 81-02, or whatever, as an 81-02 that was sent to
4 HL&P but they're completely different reports.

5 MR. PIRFO: Maybe clear it up, there were vendor
6 reports as opposed to inspection and facilities reports.
7 And this occurred at the close of Phase I when Mr. Reese,
8 myself and Mr. Sinkin met. He advised us that he had
9 proposed to introduce these into evidence. He said they
10 were already in just looking at the numbers and not looking
11 at what the reports actually were and when we were looking
12 at the Phase I partial initial decision, we saw that they
13 were listed there by number and we just assumed they were
14 the same thing. So we're not offering the exhibits but
15 that was the confusion. They were vendor reports as
16 opposed --

17 JUDGE BECHHOEFER: I see.

18 MR. SINKIN: We'll try to clear that up somewhere
19 down the road.

20 JUDGE BECHHOEFER: I take it we probably don't
21 have copies of those. Is that correct?

22 MR. SINKIN: My guess is you don't.

23 MR. AXELRAD: And my guess is that it's years too
24 late to bring that subject up. If we could move on to the,
25 next witness.

1 JUDGE BECHHOEFER: Right. Right.

2 MR. AXELRAD: We would now like to call Mr.
3 Oprea, who has previously been sworn.

4 GEORGE OPREA
5 called as a witness on behalf of Applicants, having been
6 previously duly cautioned and sworn, testified upon his
7 oath as follows:

8 DIRECT EXAMINATION

9 By Mr. Axelrad:

10 Q Mr. Oprea, will you please state your full name
11 for the record.

12 A I'm George W. Oprea, Jr.

13 Q Mr. Oprea, do you recall when Mr. Goldberg
14 recommended to you undertaking a third party review of
15 Brown & Root engineering at the South Texas Project?

16 A I don't recall the exact date. But the time
17 frame was somewhere around mid-November of 1980 to about
18 early December, 1980.

19 Q What was your understanding of the purpose of
20 such a review?

21 A Well, the purpose was to, in essence, status the
22 engineering that Brown & Root was responsible for to get a
23 feel as to how well they understood many of the important
24 and unique aspects as relates to some of the nuclear
25 analysis and related engineering discipline activities, and

1 to see how well they are supporting the project
2 construction and goals that were expected to be met as
3 viewed through the owners' eyes.

4 Q In your discussions, did Mr. Goldberg state that
5 the review of Brown & Root engineering should be undertaken
6 in order to prepare for the hearings on the South Texas
7 Project operating license?

8 A No, not at all.

9 Q Did Mr. Goldberg, in your discussions, state that
10 the results of the review of Brown & Root engineering would
11 be useful if engineering questions arose at the operating
12 license hearings?

13 A I don't recall him saying that, but he may have.

14 Q Did you read I&E Report No. 79-19, the resulting
15 show cause order and the notice of violation?

16 A Yes, I did.

17 Q Did you sign Applicants' responses to them?

18 A Yes.

19 Q Did you read the Commission's decision of
20 September 22, 1980, denying intervenor's request for
21 hearing for the show cause order and agreeing with the
22 Boards' intent to hold an early hearing?

23 A Yes, I did.

24 Q Did you read the Boards' order of December 2,
25 1980, specifying the issues to be heard in Phase I of the

1 hearing?

2 A Yes, I believe I did.

3 Q In light of your knowledge of the background of
4 Phase I hearing and of the Phase I issues, do you believe
5 that the third party review of engineering was relevant to
6 those issues?

7 A No, not at all.

8 Q Did Mr. Goldberg suggest to you that the third
9 party review should be performed in order to deal with
10 Phase I issues?

11 A No.

12 Q Did you regard the undertaking of the Quadrex
13 review as one of the corrective actions contemplated by the
14 show cause order or the response?

15 A No, I did not.

16 Q Did you attend the South Texas Project Management
17 Committee meeting on December 4, 1980?

18 A I believe I did, yes.

19 Q Do you recall any discussion at that meeting
20 regarding the scope of the issues in Phase I?

21 A No, I don't recall that.

22 Q Do you recall any discussion at that meeting of
23 using the third party review of Brown & Root engineering as
24 a method for demonstrating at the Phase I hearing that HL&P
25 was competently discharging its responsibilities for

1 engineering and had not abdicated its responsibilities in
2 that area as an NRC licensee?

3 A No.

4 Q You have before you a copy of Applicants' Exhibit
5 79 which contains Mr. Thrash's notes of the Management
6 Committee meeting of December 4, 1980. Do you have that in
7 front of?

8 A Yes, I do.

9 Q Please turn to the second typewritten page, the
10 page marked 2052 in the upper right-hand corner. And the
11 discussion underneath in parentheses a few lines below
12 3:10, where it refers to "need overview by more experienced
13 engineers." Does that indicate to you that the forthcoming
14 review of Brown & Root engineering was discussed at that
15 meeting?

16 A Yes, it so does.

17 Q I am handing you a copy of pages 14103, through
18 14105 of the transcript in this proceeding of August 3,
19 1985. I have extra copies.

20 JUDGE BECHHOEFER: I guess I could use one.

21 Q (By Mr. Axelrad) I would like you to briefly
22 review those pages, particularly the question and answer
23 beginning at line 14 on Page 14103. And actually the
24 balance of the following pages, 14104 and 14105. A
25 memorandum and order of November 14, 1985, the Board

1 indicates that there may be an inconsistency between the
2 testimony on these pages and the discussion that took place
3 at the Management Committee meeting on December 4, 1980.

4 At page 14103, as I directed your attention, you
5 were asked when was the Management Committee first informed
6 of decision to hire the Quadrex Corporation. And you
7 replied, "I don't recall the exact period of time, Mr.
8 Sinkin. I do know that in one of our March meetings that
9 there was some mention made of Quadrex assessment and
10 subsequently to, I believe in April and then perhaps later
11 on either in May or June."

12 And then on the subsequent pages in responses to
13 questions from. Mr. Sinkin, you acknowledge that Nuclear
14 Services Corporation, the predecessor of Quadrex, was
15 mentioned at the February 1981 meetings of the Management
16 Committee. Did your testimony on August 3, 1985, in these
17 three pages, represent your best recollection of this
18 subject at that time?

19 A Yes, it did.

20 Q Why didn't you mention the December 4, 1980
21 Management Committee meeting at that time?

22 A Because I just did not remember it. The fact
23 that I was able to see these other documents that Mr.
24 Sinkin presented to me refreshed my memory for the February
25 and other meetings that we had. And it wasn't until

1 preparation for this particular hearing this date that I
2 was aware of the December 4th minutes that Mr. Thrash took
3 during a Management Committee meetings in which, indeed,
4 discussions were made at that time about the possibility of
5 bringing on a third party engineering A&E to do the
6 engineering assessment work for the project.

7 Q You are referring to Mr. Thrash's notes of the
8 meeting --

9 A Yes, his notes.

10 Q -- of December?

11 A For the December 4th meeting, 1980, right.

12 Q Were you present at the STP Management Committee
13 meeting on February 19, 1981?

14 A I believe I was.

15 Q You have before you a copy of Applicants' Exhibit
16 80, which are Mr. Thrash's notes of that meeting. And I
17 direct your attention to the third page, the one that's
18 marked 81037 in the lower right-hand corner.

19 About three quarters down on that page, there was
20 a line which states, "Oprea didn't think would affect May
21 hearings." That line appears three lines below some
22 discussion of "affect on OL hearing of adverse audit."

23 Do you recall stating at that meeting that you
24 did not think that an adverse audit would affect the May
25 hearings?

1 A I don't recall that. But in all probability, I
2 made a statement similar to that because I never did feel
3 that what we were doing in regard to third party assessment
4 of Brown & Root's engineering activities had any
5 relationship whatsoever to the Phase I hearings, because
6 the issues I thought were clearcut before that Phase I
7 hearing.

8 Q At that meeting, this February 19, 1981 meeting,
9 was there any disagreement between you and Mr. Goldberg as
10 to the relevance of the Quadrex review to the Phase I
11 hearing or as to the impact of adverse results from the
12 review on such hearings?

13 A No, not at all.

14 Q Do you believe that the results of the Quadrex
15 report reflected that HL&P had abdicated its
16 responsibilities for engineering as an NRC licensee?

17 A No.

18 Q Did you and Mr. Goldberg have any disagreement on
19 the reasons for not turning over the Quadrex report to the
20 Board?

21 A No, not at all.

22 Q Did you ever discuss that subject with Mr.
23 Goldberg?

24 A No, I don't believe so. I believe Mr. Goldberg
25 made a decision relative to the handling of that record. I

1 felt that the issues for Phase I hearings were clearcut;
2 they were quality assurance, construction related
3 activities relative to show cause and 79-19, and I felt
4 that what was obtained through the assessment of the
5 engineering activities of B&R by Quadrex did not relate
6 whatsoever to the Phase I hearings.

7 Q Okay. Mr. Oprea, you also have before you a copy
8 of Applicants' Exhibit 81, which are Mr. Thrash's notes of
9 the meeting of February 20, 1981. Have you reviewed that
10 document?

11 A Yes.

12 Q Does anything in Applicants' Exhibits 79, 80 or
13 81, which are Mr. Thrash's notes of the Management
14 Committee meetings of December 4, 1980, February 19, 1981
15 and February 20, 1981, does anything in those documents
16 change your recollection as expressed in your previous
17 testimony as to the reasons for HL&P's commissioning of the
18 Quadrex review or the relationship of the Quadrex review to
19 the Phase I hearing?

20 A No.

21 MR. AXELRAD: Applicants have no further
22 questions of Mr. Oprea, Mr. Chairman. He's now available
23 for cross-examination.

24 JUDGE BECHHOEFER: Mr. Sinkin.

25 MR. SINKIN: Thank you.

CROSS-EXAMINATION

By Mr. Sinkin:

Q Mr. Oprea, in your review of 79-19, when you were responding to all of that, were you aware of any of the problems in that notice of violation, the 79-19, that related to engineering?

A No, I don't believe that some of the items required engineering solutions. And as a result, those things that were construction related representing engineering solutions to validate the authenticity of the construction activities was the response of 79-19.

Q Were you aware of any problem related to field requests for engineering action?

A I was aware of the use of the FREA's as they called them, yes.

Q Was their use a matter of controversy in the 79-19?

A Well, I believe, if I recall, the NRC felt that the FREA's in essence somewhat, I would say, violate the use of NCR's. And there were some confusion in the use of FREA's versus NCR's and the FREA's then were completely modified to make sure there wasn't any conflicts in the handling of NCR's versus what was then called the FREA's.

Q Let me direct your attention to Applicants' Exhibit 79, Page 80224, the second page of the typed note.

1 Starting at the time 3:10, it is recorded a
2 remark by Mr. Hancock which concerns apparently a remark by
3 Mr. Goldberg in the November meeting about going slow in
4 engineering. Can you tell me what Mr. Goldberg said in
5 November about going slow in engineering?

6 A No, I can't. I don't recall that.

7 Q Do you remember the topic of a reverification of
8 engineering coming up in November?

9 A No, I don't recall that either.

10 Q The next line is Mr. Goldberg recorded as stating
11 that he thinks construction errors will raise engineering
12 questions. Can you tell me your best recollection of what
13 Mr. Goldberg was referring to as construction errors that
14 would raise engineering questions?

15 A Well, I don't recall exactly the conversation,
16 although I can assume and speculate, whether or not that is
17 acceptable to this forum, that he is talking about in a
18 general sense, that construction errors that will occur
19 over time, the balance of the project, could certainly
20 solicit some questions that have some engineering
21 overtones.

22 Q Did you expect in the Phase I hearings that the
23 construction problems that had been identified would lead
24 to questions about the adequacy of Brown & Root's
25 engineering?

1 A No, I expected, perhaps, that there could have
2 been some questions there related to engineering solutions
3 of those construction deficiencies, but not necessarily any
4 questions that would in a broad sense talk about Brown &
5 Root's engineering activities.

6 Q When Mr. Goldberg came to talk to you about
7 performing the third party independent review, did he come
8 to you to seek your approval for doing that or did he come
9 to you simply to inform you that he intended to do that?

10 A Best I recall, Mr. Sinkin, it was sort of a
11 general conversation. If you recall, Mr. Goldberg came on
12 board as vice-president of engineering and construction for
13 our nuclear activities in the latter part of October. And
14 I know based on his background and I know that irrespective
15 of whomever would have come in, including myself, that when
16 you come in on a new project that has already been in
17 operation for a number of years, one of the quickest ways
18 to get a feel for where you are on a project is to find out
19 how good the engineering is and where it is, against
20 construction activities, the planned activities as well as
21 the ongoing activities.

22 And after he had a number of meetings with our
23 staff and I'm sure with Brown & Root's staff trying to get
24 an assessment for where they were in engineering in support
25 of the construction program, he felt that he really needed

1 to go to an outside third party.

2 Now, it seems, yes, there's a general discussion
3 in regard what he was finding in that short period of time
4 and he needed a real fast review of the status of the
5 engineering. And thought that one way of doing it was to
6 get a third party that had not been related to the project
7 in the slightest or perhaps in a very slight way, but in
8 essence one that had an experience base, had the personnel,
9 and in essence had not any affiliation in the project in
10 the past.

11 And I just remember the general dialogue and I
12 told him as I recall that I thought it was a good idea,
13 because earlier in 1980, I wanted to make an engineering
14 assessment but because of responding to show cause and
15 79-19, we were unable to do it. And I thought it was just
16 an excellent idea to get a real current status of Brown &
17 Root's activities pertaining to the engineering and how it
18 stood in support of the construction program.

19 Q Can you give me a sense of how long that
20 discussion was between you and Mr. Goldberg?

21 A Oh, it could have been fifteen, twenty minutes or
22 so.

23 Q And did you reach your decision right there that
24 it was a good idea and you should go ahead with it or did
25 you have a later meeting where you said, "Okay, I agree"?

1 A The best I recall, it may have taken place at the
2 time that we discussed it.

3 Q Did you suggest to Mr. Goldberg that Mr. Jordan's
4 approval should be sought for this study?

5 A Not that I recall.

6 Q Did you and Mr. Goldberg subsequently discuss the
7 proposal to conduct the study with Mr. Jordan?

8 A I'm sure we had at some subsequent date informed
9 him of what we intended to do. In fact, I believe even at
10 that particular date, Mr. Goldberg and his staff were
11 starting to establish the scope as well as identify the
12 potential A/E's that perhaps would qualify to bid on the
13 job and ultimately be reviewed for that potential.

14 Q Do you remember specifically a meeting with Mr.
15 Jordan to discuss the initiation of the study?

16 A I don't know if a meeting was set up specifically
17 to identify the fact that we were doing it. I had dialogue
18 with Mr. Jordan frequently during the course of any given
19 week, and it could have been after the discussion that Mr.
20 Goldberg and I had about moving forward on the third party
21 engineering assessment that I informed of what we intended
22 to do.

23 And it could have been at a point in time when
24 both Mr. Goldberg and I were discussing other things with
25 Mr. Jordan it came out at that time as well. I don't know

1 the exact circumstance but I know it was an after-the-fact
2 type of discussion the best I recall.

3 Q Going back to Applicants' Exhibit 79 that we were
4 looking at a moment ago, Page 80224, at the bottom of that
5 page, Mr. Thrash records GO, which normally referred to
6 George Oprea, apparently, "thinks NRC may make a major
7 inspection early next year."

8 Do you remember arguing to the Management
9 Committee in December of 1980, that you thought NRC might
10 make a major inspection?

11 A I believe that related to the potential of a
12 major review of how well we have undertaken the compliances
13 to some of the show cause and 79-19 activities and also I
14 believe at subsequent Management Committee meetings, we
15 reported on the meetings that we had with NRC that in
16 essence was a preview of what we were doing in planning for
17 operations.

18 And I believe in one of these documents, either
19 Exhibit 2 or 3, I made the report such as that to the
20 Management Committee, where NRC wanted to find out what our
21 plans was, how we were going to organize and how we were
22 going to get to train our people to make sure that at the
23 appropriate time, we would be able to shoulder the
24 responsibilities of starting up the reactors and
25 maintaining the normal operations once we went up to full

1 power.

2 Q I note that the remarks of Mr. Goldberg recorded
3 just prior to your remarks deal with questions about how
4 HL&P would know that Brown & Root's engineering was correct
5 and whether HL&P had a responsibility to verify Brown &
6 Root's engineering. And then you bring up the topic of the
7 possible major inspection. Does that perhaps change your
8 recollection of the context in which you made that remark,
9 as to what major inspection you expected?

10 A No, not at all. I think you have to really get
11 in step with what the kurth of these Management Committee
12 meetings. I don't feel particularly that the sequence of
13 what Mr. Thrash has down here does not represent one
14 hundred percent of what may have occurred. The Management
15 Committee has wide latitude asking questions and pursuing a
16 number a things in the course of our meeting over and above
17 that which is set down in the agenda.

18 And these comments here could have been a direct
19 result of a general dialogue that occurred as a result of
20 something that Mr. Goldberg may have said in that case our
21 something he may not have, so I can't really say that
22 they're interrelated.

23 Just looking at what purportedly was what I said,
24 that doesn't make sense at all that I would interrelate a
25 major inspection against what Mr. Goldberg said in those

1 questions or comments prior to that, as an engineering
2 activity. I knew we were in early startup at that time as
3 a result of show cause, that we were moving forward on AWS
4 and ASME welding as well as some concrete pours and I know
5 that the NRC wanted to find out just how well we were doing
6 and one way of doing it, based on all the things that we
7 said we were doing, was come in and have a very thorough
8 review of what we were doing.

9 And I knew that was a possibility just based on
10 the contacts I had with Region IV as well as we were aware
11 of the fact that the people from Washington to be were
12 coming in to preview us in regard to how well we were
13 planning for our operations responsibilities.

14 Q Turning to Applicants Exhibit 80, Page 81037, the
15 third typewritten page, down at the bottom of that page
16 there's a dialogue initiated by Mr. Hancock asking how
17 receptive Brown & Root was to the study that was in
18 progress. And you were recorded as saying "as late Friday,
19 Brown & Root had tried to do an end run around and avoid
20 the whole thing." Do you remember what you were referring
21 to as Brown & Root's attempts to do an end around on the
22 Quadrex Corporation's study?

23 A I don't believe Brown & Root wanted the
24 assessment to be made. And as a result, they may have
25 attempted as late as that particular date, that's in

1 February, to still try to somehow subvert it to the
2 position of not being a relative assessment. That's the
3 only thing I can state on that, because they made several
4 comments over -- during the course, I believe, of the
5 assessment that that assessment in itself was eating up
6 some valued engineering talent time because they had to sit
7 down and talk to people from Quadrex. I just looked at
8 that as another excuse.

9 Q Well, apparently some particular event took place
10 on the Friday just prior to this Management Committee
11 meeting on February 19 that you viewed as an attempt to
12 avoid the entire study. Do you have any recollection of
13 what that --

14 A No.

15 Q -- event was?

16 A No. It's either one of -- perhaps one of their
17 senior officers calling me or perhaps a senior officer in
18 charge of that program may have called one of the owners
19 and tried to use the owner as a pressure vehicle to get us
20 to change our mind.

21 Q Did that in fact happen to your knowledge, Brown
22 & Root calling other owners to get to you try to call off
23 the study?

24 A I don't know that was a fact or not. I was just
25 speculating that as one of two courses that they may have

1 taken.

2 Q Did Brown & Root officers contact you during the
3 study and ask you to call it off?

4 A I know I had some dialogue or they had dialogue
5 with me because they initiated the calls and I'm sure just
6 based on recall, they were very unhappy with the fact that
7 they had to be involved in that assessment.

8 Recognize, we're putting a lot of pressure on
9 Brown & Root relative to engineering production to support
10 the construction schedule and they were very sensitive to
11 the fact that this was another way of eating up some
12 valuable talents to support the assessment that Quadrex was
13 making.

14 Q Did you have any sense of them wanting to call it
15 off because of what what was being found by Quadrex
16 reviewers?

17 A Not that I recall, no. No. They were under
18 extreme pressure from us as well as the other owners for
19 good engineering production so that we would have timely
20 and good sequential construction activities.

21 Q Is it your testimony that to the best of your
22 recollection, you and Mr. Goldberg did not discuss whether
23 the Quadrex report or the Quadrex study was related to the
24 Phase I issues?

25 A I don't believe we discussed that at all because

1 it was obvious from the results of the findings that they
2 were not. They had no relationship whatsoever.

3 In fact, if I recall, various issues as showed up
4 in show cause and 79-19 weren't even -- were not part of
5 the scope of the activities that Quadrex has related to
6 making that engineering assessment. Those weren't even
7 covered. So we were really interested in really statusing
8 the adequacy of engineering effort by Brown & Root to
9 support the construction goals of that project.

10 Q And when you say "statusing the adequacy," do you
11 have a quality component in that?

12 A Not from the standpoint of a quality assurance
13 component as you had connotated in our August meetings.

14 Q I'm sorry, I don't understand that last phrase.
15 As I had connotated in your August meetings?

16 A You made similar comments in August.

17 Q Oh, in the hearings?

18 A Yes.

19 MR. SINKIN: That's all I have, Mr. Chairman.

20 JUDGE BECHHOEFER: Mr. Pirfo.

21 MR. PIRFO: Thank you, Mr. Chairman.

22 CROSS EXAMINATION

23 By Mr. Pirfo:

24 Q Good morning, Mr. Oprea.

25 A Good morning.

1 Q Mr. Oprea, I'd like the talk about the decision
2 again to hire Quadrex and your authority vis-a-vis that of
3 Mr. Goldberg and the discussions you had.

4 Is it your position that Mr. Goldberg should have
5 brought this decision to you to decide whether Quadrex
6 should have been hired?

7 A No, not necessarily. I think it's just a good
8 management technique that when you take a step that I would
9 call a very important step, that you indicate what your
10 position is on that particular activity. I don't think Mr.
11 Goldberg would have come to me to the idea of saying, "Can
12 I get your approval to do this?"

13 It was a general discussion in regard to the
14 engineering effort and the need to make a assessment. He
15 didn't need my approval because I wanted to do something
16 similar to that at least a year before that and it was
17 something that had to be done and I just concurred, I said,
18 "It's a good idea."

19 Q But you told him it was a good idea at that point
20 when he first raised it with you, I believe that was your
21 testimony?

22 A Yes.

23 Q You didn't think long and hard about it to
24 determine whether it should be done?

25 A I thought long and hard about it about a year

1 before that. And in April or May of 1980, I wanted to make
2 one at that time, with just about 30 days or so prior to
3 getting the show cause and 79-19 citations.

4 So I felt even at that point that I would like to
5 have done it; I didn't change my position in November; I
6 didn't change my position in December, January, February
7 and through May until we finally got the report. I thought
8 it was something that we needed to do and we had to do it
9 and it was something that unfortunately came a little later
10 in time than I would liked to have seen it.

11 Q So this deliberative process had all occurred and
12 Mr. Goldberg brought it up again to you?

13 A I don't understand the question.

14 Q Well, you had thought long and hard about it long
15 before Mr. Goldberg mentioned it to you?

16 A Yes. That's right. I believe I had.

17 Q Mr. Oprea, I show you the reporter's transcript
18 from yesterday, the testimony of Mr. Goldberg at pages
19 15544. And I'd like you to review Mr. Goldberg's response
20 to a similar question on that decision from me, and towards
21 the end of that question, you'll see that Mr. Goldberg
22 states that you thought long -- that it was a very
23 innovative measure and that Mr. Oprea had thought long and
24 hard about it and saw that the wisdom of doing it and he ,
25 felt it important enough to discuss with Mr. Jordan. Would

1 you explain what I view as an inconstistency there?

2 A Can I read --

3 Q Sure, take your time.

4 A What lines?

5 Q Whatever you need to read in context, but it's
6 pages 15544, the last two lines and it runs over on to page
7 15545, but take your time to review whatever pages you feel
8 is necessary.

9 A Okay. I've read it.

10 Q Okay. My question is: I view that as being
11 somewhat inconsistent with what you just testified to.

12 A Well, the inconstistency probably relates to my
13 recollection. With the number of things that were
14 occurring during that time frame, it very easily could have
15 taken place as Mr. Goldberg said. We're going back to
16 November, December thereabouts, of 1980; I am a little
17 older than Mr. Goldberg and Mr. Jordan and perhaps that for
18 some reason causes me to have vague recollection instead of
19 clearcut recollection of a number of things.

20 But this could very easily have happened as well.
21 I felt when Mr. Goldberg discussed it with me, that this
22 was something that we should do. Very easily could have
23 been that we went ahead and discussed it with Mr. Jordan.
24 I don't recall that we really went to him to get the
25 permission to do it. I think that permission rested solely

1 with in Mr. Goldberg's and my camp to proceed to make the
2 engineering assessment.

3 It was only fair to let our chief officer know of
4 what we were about to do. And just like Mr. Goldberg
5 discussed the same thing with me, I'm sure if he would have
6 been on board a year earlier, he probably would have had
7 more experience with the company and he probably would have
8 done a number of things on his own initiative and not inform
9 me of those things. But I'm not sure he needed guidance
10 from me on how to handle it if we had to handle it within
11 the organization. I just don't recall I -- the time frame
12 is very short in which the decision was made to move
13 forward and do it and these things pretty well overlap in
14 my mind's eye. So this could very well easily have been
15 the approach that was taken.

16 Q What I want to get at is in terms of the
17 authority or who would put the final stamp of approval on
18 doing this. In your view, it was Mr. Goldberg's final --

19 A He could have done that on his own volition if he
20 wanted to. But I can understand how this was handled by
21 virtue of the fact that he was on board a little over a
22 month at this time; he's never worked for a utility before,
23 formerly with Stone & Webster. And he felt that it was
24 good judgment to discuss it with me since I was in charge
25 of all of the nuclear activities of the company and I

1 thought it was a good judgment call.

2 Q Okay. But in response to the questions I asked
3 you a bit earlier this morning, you said that you had done
4 all the thinking about this and thought it was a good idea
5 when Mr. Goldberg first presented it to you. And Mr.
6 Goldberg's testimony yesterday was that you thought long
7 and hard about it at that time and then saw the wisdom of
8 doing it. I'm trying to determine when the wisdom of doing
9 it was first seen by you, I realize that's the only person
10 you can speak to.

11 MR. SINKIN: Objection, Mr. Chairman, asked and
12 answered.

13 MR. PIRFO: Well, I think the problem I'm having
14 is there's two different answers and that's what I'm trying
15 to --

16 MR. SINKIN: By Mr. Oprea? I think there's one
17 answer.

18 MR. AXELRAD: Mr. Chairman, the objection is just
19 intended to prevent the witness from explaining what
20 appears to be a minor inconsistency. The witness should be
21 allowed to explain what Mr. --

22 MR. PIRFO: To perceive as as inconstistency.

23 JUDGE BECHHOEFER: I think we'll allow the
24 witness to answer it.

25 MR. PIRFO: Thank you, Mr. Chairman.

1 A Based on the opportunity of looking at the
2 December 4th notes by Charlie Thrash, who's recording
3 secretary of the Management Committee, it was obvious from
4 just what he recorded that the decision was made sometime
5 in that time frame, around December 4th or earlier to it.

6 Q (By Mr. Pirfo) Okay. But it was made before
7 that meeting?

8 A I felt it was just by reading the notes here,
9 because --

10 Q The problem I'm having, you are pointing to the
11 transcript and saying "the notes."

12 A Oh, sorry. I believe it's Exhibit 79, on page --
13 top of the page, 20523.

14 Q Right, that was the December 4th meeting?

15 A The December 4 meeting.

16 Q And the decision had been made by that time to
17 have the independent third party review done. Irrespective
18 of who made the decision, be it you, Mr. Goldberg or Mr.
19 Jordan, the decision had been made.

20 A Right. Because else I wouldn't have said we plan
21 to hire them in the third week of January.

22 Q Now, referring to a different facet here, you
23 mentioned that Brown & Root -- and the problem I have with
24 this I'm not sure -- you used the word "speculation" in
25 your answer and I want to figure out what was speculation

1 and what was not and what you actually remembered.

2 A few times during your answers to Mr. Sinkin's
3 questions this morning, you mentioned that calls had been
4 made from Brown & Root to other partners. Was that
5 speculation on your part?

6 A Yes, yes, it was.

7 Q You do not know for a fact?

8 A I don't recall today exactly what took place in
9 that time frame back in February 1981. But apparently
10 something occurred that was brought to my attention that
11 made it sound like Brown & Root was trying to keep the
12 assessment from going forward because it had an impact on
13 the engineering production.

14 Q But you had this feeling that the independent
15 third party assessment was being impeded in some way by the
16 other partners?

17 A No.

18 Q Was that the impetus of Brown & Root or somebody
19 else?

20 A No, no, I didn't mean to give that impression at
21 all. There wasn't any action taken by anybody to impede
22 the assessment, it was ongoing. What somebody was trying
23 to do was to call it off; it was ongoing at that time. I
24 guess it was in its fairly early stages.

25 So my comment here is that as late as last

1 Friday, they tried to do an end around which this my
2 vocabulary, to attempt to get that assessment stopped
3 because it had a potential impact on the production that
4 they are responsible for to provide the engineering for
5 construction.

6 Q Were other potential impacts discussed, cost, for
7 example?

8 A I'm sure that there was some effect on that, too,
9 because if you cannot get the engineering production out
10 over a given period of time because of an assessment, there
11 will be some additional costs that will go with that loss
12 in time.

13 Q Potential impacts on the licensing hearing,
14 however, was not discussed?

15 A Oh, no, sir, not that I recall.

16 Q So then you did not feel a necessity in this
17 December 4th meeting to use the same phrase I used by Mr.
18 Goldberg to marshal evidence or marshal your reasons for
19 having this independent third party review; in your mind
20 the decision had been made by whom -- at HL&P and that this
21 independent third party review was to proceed?

22 A That's right.

23 Q Would you characterize the presentation of the
24 information on this third party review to the Management
25 Committee as a courtesy to the Management Committee, keep

1 them apprised?

2 A We have done that from the beginning of the
3 project. And I can't help but feel that this particular
4 point in time I guess there were dialogue on the
5 engineering activities and it was just the appropriate time
6 for it to be brought up.

7 Q Who made the presentation, you or Mr. Goldberg?

8 A I believe Mr. Goldberg did. Excuse me.

9 Q If I could have the Boards' indulgence for just
10 one minute.

11 A I might mention when you say "presentation," you
12 make it sound like a formal type of activity. There's a
13 real loose way in which messages and information is
14 conveyed at these Management Committee meetings, when
15 owners make presentations.

16 Q Presentation was not a charged word that I was
17 trying to use.

18 Mr. Oprea, in reviewing Applicants' Exhibit 80
19 and 81, do you feel that they reflect fully the reasons for
20 the Quadrex review?

21 A Well, when you say "reflect fully," you say that
22 with certain specificity, I believe. I think the general
23 message that was conveyed to the Management Committee in
24 all those meetings is the fact that we were attempting to
25 find out the true status, the current status, I should say,

1 of the Brown & Root engineering effort in order to support
2 the project goals. And I believe although these are, I
3 call them cryptic brief notes of sort from Mr. Thrash, I
4 believe the dialogue that was had with the Management
5 Committee over time was thorough enough for them to fully
6 understand the intent of that assessment.

7 Q Would someone that was not at the Management
8 Committee meetings be able to find that meeting -- strike
9 that, please.

10 Would someone that was not at those Management
11 Committee meetings now four years after the fact, reviewing
12 these notes, be able to find that -- I know you don't like
13 the word -- but, presentation in these notes, the reasons
14 for the independent third party review, in your opinion?

15 A I think in a general sense, yes.

16 Q Where -- would you point me to to find those
17 reasons? Take your time.

18 A Well, of course, the first, the fact that the had
19 the Hancock report on Page 2052, of 79. He talked about
20 slow engineering in November. That led to an overall
21 discussion of engineering, I feel sure, and then Mr.
22 Goldberg talking about the need for a third party review.

23 Further down, you have questions by Poston who
24 has done pipe analysis that leads more to the fact that Mr.
25 Goldberg said that we need to make sure that the

1 engineering is correct. We ought to have the
2 responsibility to verify.

3 And of course, that reads itself more into the
4 need to make an assessment of where we stand on it.
5 Although through these three days of meetings, I think
6 you'll see references that relate to engineering activities
7 that the Management Committee was interested in reviewing,
8 not specifically third party assessment, but the fact
9 there's talk about pipe whip, hangers, cable trays, I think
10 there's something in here about the reactor cavity and all
11 those are engineering related subjects. And I think from
12 that, one would get a feel for the necessity for the
13 assessment. That's how I find the meeting.

14 Q So referring to the particular section you talked
15 about, Page 2052 at 3:10, Mr. Hancock asks a question with
16 regard to "going slow" and Mr. Goldberg responds and at
17 3:15, Mr. Poston asks a question and Mr. Goldberg's
18 response, you're saying from the general discussion at
19 these meetings, the necessity for third party review became
20 apparent or was at least demonstrated to the Management
21 Committee?

22 A I think not only from these meetings but even
23 predecessor meetings. There had been a reoccurring concern
24 on our part about the engineering, there had been a number,
25 of different meetings that we have had where we were

1 discussing engineering, Brown & Root's engineering
2 activities, the timeliness of it, the production of percent
3 completion against needed construction work and all that,
4 and these were not the only meetings.

5 You can probably go through any of the notes and
6 see that from time to time, there are discussions and
7 questions and dialogue related to various aspects of the
8 engineering effort. And when you move this all and roll it
9 all up to November, December of 1980, and we walk in and
10 say we're going to make a third party assessment, I think
11 there's a full accord in everybody's part as a need to get
12 a real current assessment of where we are in that
13 engineering.

14 Q Let me use that image you used that you walked in
15 and said said you were going to have the third party
16 review, and there was nothing you looked for approval for?

17 A No.

18 Q No, you did not look for approval?

19 A No, we did not look for approval.

20 Q Mr. Oprea, at that time, did you have see a
21 direct linkup between the possible results of this
22 independent engineering review and licensability of the
23 plant ultimately?

24 MR. AXELRAD: May I just get clarification as to
25 when we're talking about, December 1980?

1 MR. PIRFO: yes, sir, I'm sorry.

2 Q (By Mr. Pirfo) At the time of this meeting.

3 A At the time of this meeting?.

4 Q At the time of the December 4th, 1980 meeting?

5 A No. I didn't think about the licensability,
6 ultimate licensability, not Phase I, but the overall
7 licensability activities that relate to STP as being
8 effected.

9 I think as a subsequent date when we had further
10 discussions perhaps in-house along with the Management
11 Committee, there was concern about the possibilities of
12 adverse findings and such.

13 Q Was your thinking at that time one of how bad
14 could it be? Surely if the report came in totally damning
15 then you would see an impact on licensability. The thought
16 did not cross your mind at that point because you did not
17 expect something that bad? I'm not saying as bad as it
18 was, I'm just saying what you expected the worse case
19 scenario at that time.

20 A In December, I really didn't know what to expect,
21 to be quite frank. I couldn't help but feel that perhaps
22 there could have been some holes in the engineering; I had
23 no feeling as to where specifically. I just felt that
24 there was just a real good current need to get a current
25 status of that engineering activity. And once we had

1 that, then we had a better feel as to the affect of that
2 engineering activity on the ultimate licensability of the
3 plant.

4 MR. PIRFO: Thank you, Mr. Oprea. I have no
5 further questions, Mr. Chairman. .

6 BOARD EXAMINATION

7 By Judge Bechhoefer:

8 Q Mr. Oprea, I believe your counsel asked you about
9 whether you thought the Quadrex review would be useful in
10 indicating that HL&P had not abdicated its responsibility
11 for supervision of the engineering activities of the
12 project, something along that line. I wanted to ask you
13 really the converse varies. Did you view the Quadrex
14 review as an example of HL&P's assumption of responsibility
15 for carrying out a successful project?

16 A I'm having a hard time to understand "for our
17 assumption of that responsibility."

18 Q Well, as a method of demonstrating that HL&P was
19 fully carrying out its responsibilities to manage the
20 project?

21 A Well, I felt that we shouldered all the
22 responsibilities that pertained to the engineering
23 construction production as well as those licensing or
24 regulatory requirements that pertain thereto. We had no
25 indications of any concerns whatsoever as it related to our

1 regulatory responsibility.

2 Certainly the Quadrex report in itself indicated
3 that Brown & Root was in real tough straights relative to
4 engineering activity. We had reoccurring concern about
5 their engineering activity for several years. But we did a
6 number of different things to assure ourselves that Brown &
7 Root would be successful.

8 We really organized, modified the structure over
9 time, several different times, beefed up the staff, put
10 additional engineers on our staff; we relocated our
11 engineering staff and other members of the project
12 management team to Brown & Root's offices in order to be in
13 real close operation with them and to be able to aid them
14 in doing a number of things; we brought in consultants to
15 aid us in our assessments.

16 I felt in light of what industry was doing at
17 that particular time, we exceeded many of the things that
18 people in the industry were doing in order to make sure
19 that we were shouldering our responsibility in accordance
20 with our commitments.

21 Q Was not the Quadrex review or the third party
22 review another example of this responsibility, exercising
23 responsibility?

24 A Absolutely. I believe the fact that we went
25 ahead and did undertake that assessment indicated that we

1 were in responsible charge and we were shouldering that
2 responsibility by undertaking that additional assessment.

3 Q At the time of the December 4, 1980, Management
4 Committee meeting, were you personally aware of the issues
5 that were going to be adjourned in Phase I, the issues
6 A to F, the various contentions?

7 A I believe I read the order. I think that is what
8 that a December 2nd order?

9 Q The order was December 2nd. The issues
10 themselves were approved several weeks earlier at a
11 prehearing conference.

12 A I believe that I may have been aware of it,
13 because our Washington attorneys, Mr. Newman and Mr.
14 Axelrad, once these prehearing conferences ended up with
15 whatever the responding parties were supposed to do and
16 respond to, they did inform us by telephone calls and
17 perhaps even by hard copy documents of what those issues
18 were. But I recall in a vague sense that I was aware of
19 the issues, during that intervening time.

20 Q Well, given that awareness, did the discussion at
21 the December 4 meeting, being aware of the issues, would
22 the general discussion of the third party review at the
23 December 4 meeting have possibly taken on the context of a
24 message to indicate that HL&P was exercising responsibility
25 for the project?

1 A I don't think there was any interrelationship to
2 what was said in the Management Committee meeting about the
3 need for a third party assessment vis-a-vis the issues that
4 came out of the prehearing conference. I don't believe
5 those were discussed or even identified in the remotest way
6 at that meeting.

7 Q Would that not have perhaps been the reason why
8 the language, "the strong testimony in OL hearing," this is
9 what appears in Exhibit 79?

10 A Oh, I think that is a general statement that Mr.
11 Goldberg may have made because he knew in a sense that the
12 Board has wide latitude on those questions that they would
13 like to pursue in a given forum irrespective of the issues
14 that had been identified to be discussed in that form.

15 And the fact that we were making this assessment,
16 the general feeling was that here again, if the assessment
17 is completed by the time we get into that hearing, should
18 any questions arise that should happen to be that which
19 would want to be pursued by this Board over and beyond that
20 which were Phase I issues, then we'd be in a position to
21 respond to them. But it had nothing to do with being
22 tailor made to support Phase I activities as sensed through
23 this hearing.

24 Q Even if that would not have been a primary
25 purpose, would that have been a secondary purpose?

1 A Not at all; never entered our mind.

2 Q Concerning the discussion of whether or not Mr.
3 Goldberg was authorized to undertake to have the Quadrex
4 study, third party review undertaken, could your counsel
5 show you CCANP 87?

6 Okay. This is a statement that Mr. Goldberg made
7 to the NRC in February of 1982. Does the last sentence in
8 the third paragraph change your recollection or refresh
9 your recollect in any way about the authorization for the
10 study?

11 MR. AXELRAD: Mr. Chairman, could you tell us
12 what that sentence is?

13 MR. BECHHOEFER: The sentence that says, "HL&P
14 management authorized me to contract with Quadrex
15 incorporated."

16 A And what was the question now, sir?

17 Q (By Judge Bechhoefer) Well, does that change or
18 modify or in any way affect your recollection of the
19 authorization to conduct, to have the Quadrex study
20 conducted?

21 A You know, I think it sounds like perhaps one is
22 trying to solicit from me that I said you have permission
23 to do so and so.

24 In a case of discussing issues such as this which
25 Mr. Goldberg brought to my attention, we may have discussed

1 it in the fact that I said "I concur, let's go ahead and do
2 it," was that authorization? I've had meetings like that
3 with Mr. Jordan, when I discussed with him a thing that I
4 liked to pursue. And I wasn't pursuing, that I was taking
5 the initiation and providing the rudimentary ground work
6 for it and it's a yes, its he would say, "Yes, it's a good
7 idea, I support that."

8 Well, I guess that's sort of authorization of a
9 sort, just by virtue every the fact that there's general
10 concurrence, "That's something we ought to do, that's a
11 good idea, let's move forward on it." I don't specifically
12 remember saying to Mr. Goldberg, "Yes, you have my
13 permission to proceed on this." And I don't remember
14 specifically that when we discussed it with Mr. Jordan, he
15 said, "Yes, you have my permission to proceed on it."

16 Continuing dialogue was such that we generally
17 agreed in concert that this is something that we should
18 proceed on and we looked at it as a group authorization. A
19 team effort to come up with the decision to move forward.

20 Q Turn to Applicants' Exhibit 80. I guess the
21 third typewritten page. Page 81037, the page you were
22 asked about by your counsel. Mr. Goldberg apparently
23 indicated, I say "apparently" because there's a question
24 mark there, but apparently indicated that if the audit and
25 the "audit" is the word used here, were adverse, it would

1 be disclosed. Did you disagree with that?

2 A No, I think that is just a natural, that's a
3 50.55(e), that in the event there was any adverse findings
4 in it that had any overtone in regard to or as far as
5 commitments schedules quality assurance commitments, we
6 would normally follow that response, we had to disclose
7 this and report it to the NRC and I believe that was what
8 he was commenting about.

9 Q And now your comment that you didn't think it
10 would affect the may hearings, which is right below that,
11 did that that anything to do with Mr. Goldberg's comment
12 about disclosing an adverse report?

13 A No, no, I don't believe so. I was aware of the
14 issues of the Phase I May hearings which of course were
15 construction and QA construction oriented and I felt based
16 on my understanding of the issues and the order that came
17 from this Board, that if we had any adverse findings that
18 were reportable, certainly we would report those in
19 accordance with our responsibilities to the NRC and of
20 course those ultimately would be given to the Board as
21 well. And that's what we did; we had several findings that
22 we had to report and we did. We followed the responsible
23 path that we were supposed to.

24 Q So when it says that you didn't think that it
25 would affect the May hearings, you were not excluding the

1 possibility that you might have to send some portion of the
2 report to NRC and to us?

3 A No, I was not excluding that. I just felt that
4 whatever we were required to do in reporting any anomaly to
5 the NRC, we would do that; we would disclose it. I never
6 thought about the fact that, you know, with -- like any
7 review, if you have people that come on board and make a
8 review, sometimes they find that you have a discrepancy or
9 two and they make a recommendations. You expect certain
10 discrepancies to show up and I expected that we would have
11 some discrepancies show up. and we did.

12 We had -- what was it three or four of them? And
13 to me they were not interrelated, that they were disjointed
14 from the standpoint of being related and identifying root
15 causes of any nature.

16 So I felt that assuming that we would end up with
17 findings that were good and some that were bad that were
18 required to be reported, we'd be doing that. I knew what
19 the Phase I issues were; of course if we had a real bad
20 report, I had no idea what "bad" meant at that time;
21 certainly we would have to look at it in light of what
22 badness was.

23 Q Turn to Applicants' Exhibit 81. The first page
24 of that exhibit. That's the February 20 meeting. And I
25 take it you were present at that meeting, in fact your

1 counsel asked you that.

2 A Yes.

3 Q Turn to the Item No. 6 at 9:35. Do you remember
4 what the discussion was or whether there was any discussion
5 about the point which says "Need to have info to meet
6 licensing hearing questions"? At that point, do you
7 remember how that statement came up and who made it? Was
8 that Mr. Barker's statement?

9 A Yes, that's what this indicates, that Mr. Barker
10 was giving a report to the CEO's and members of the
11 management committee at this February 20th meeting which is
12 our normal CEO meeting at that time.

13 And Mr. Barker was giving the status report of a
14 number of different things that pertained to the project.
15 And then on Item No. 6 at 9:35 commenced apparently the
16 engineering review. And in the course of talking about the
17 engineering review as to what we were doing, indicated that
18 we needed to have information to meet licensing hearing
19 questions.

20 And I couldn't help but feel that what he was
21 saying there was indeed reflecting what Mr. Goldberg has
22 indicated that one of the ancillary benefits should it
23 arise by having a current status report of the engineering
24 effort was to be able to answer any questions that the
25 Board might ask on the engineering questions, should they

1 ask those subjects in the May hearing.

2 Q Do you remember whether there was any further
3 discussion which Mr. Thrash may not have taken down? Mr.
4 Thrash says he only got about 20 or 30 percent of what was
5 actually said?

6 A Well, I'm sure that the CEO's may have asked some
7 questions and maybe not. Many times, a number of these
8 items are statused to me in regard to what we were doing,
9 and what we expect -- when we expect the final report. At
10 this particular point in time, there wasn't anything to
11 report on other than the fact that the assessment was
12 underway, and that I don't know if he reflected -- it
13 doesn't show here -- yes, it does show perhaps being
14 completed by April and then we'll find out from there as to
15 where we go.

16 He did indicate that just being involved in the
17 assessment that there will be an impact on the work plan.
18 So it was just a general conveyance of information about
19 that as well as to its effects on the project, about the
20 third party assessment, that is.

21 Q And you don't recall any further discussion about
22 that general point at that meeting?

23 A No, I don't.

24 Q Mr. Oprea, will you turn to Applicants' Exhibit ,
25 82, which is the proposed agenda for the December 4

1 meetings --

2 MR. AXELRAD: We will have to provide that to
3 him.

4 JUDGE BECHHOEFER: Oh, I wasn't sure what
5 documents he had in front of him.

6 Q (By Mr. Bechhoefer) Do you have any recollection
7 of what item I-G refers to?

8 MR. AXELRAD: Mr. Chairman, since Mr. Oprea has
9 not previously seen this exhibit it might be useful for us
10 to make sure he understands what this exhibit is.

11 Q (By Judge Bechhoefer) Mr. Oprea, this was
12 apparently the proposed, the first page of this is what I'm
13 asking about, the proposed agenda for the Management
14 Committee meeting which we understand was prepared by Mr.
15 Poston approximately a week before the meeting. I just
16 wanted to find out whether you had any recollection of what
17 item I-G involved. That's if item that's labeled ASLB
18 proceedings update.

19 A I really don't, I don't recall it. As you
20 indicated that Mr. Poston who is chairman of the management
21 committee, developed the agenda and used it for the purpose
22 of guiding the discussion of the Management Committee
23 meetings.

24 Many times, we have not covered -- we did not, I,
25 should say, cover items on the agenda because we just ran

1 out of time. And people would identify the import of the
2 particular subject to be discussed and many times, toward
3 the close of the meeting, a question might be asked, "can
4 we put this off until next month or at our next meeting,"
5 which might be in a few weeks and many times it's yes. And
6 many times, the agenda is not followed in toto, we
7 sometimes scrap the whole thing by virtue of the fact of
8 other things that relate to the project that need to be
9 discussed.

10 Q Do you have any idea what this item, assuming
11 it's wasn't discussed, do you know what it would have
12 involved or were you not involved in any way with that
13 item?

14 A I don't know where they really picked up the
15 subject matter. They apparently knew that the December 2nd
16 order was out -- that's the impression I get from here --
17 and wanted some feel as to what the Licensing Board
18 proceedings would be as to where we're going, dates and
19 what have you. But I'm just only speculating. The fellow
20 that develops this for Mr. Poston was Mike Hardt and how he
21 got this information, I just don't know.

22 Q I see. Mr. Oprea, I wanted to ask you some
23 fairly general questions. I want you to tell me whether
24 you fully agree with six different statements I'm going to
25 read you. And if you -- well, you can either indicate you

1 agree or disagree in full or in part.

2 First one is: The purpose of the Quadrex review
3 was to ascertain the status of engineering at STP.

4 A In a general sense, that's true, yes.

5 Q Next one is: The purpose of the Quadrex review
6 was to evaluate B&R's engineering activities as they
7 reflected on B&R's ability to complete the design of STP in
8 an efficient and orderly way.

9 A I think that's interrelated to number one.

10 Q All of these are going to be fairly similar. But
11 do you agree with that one?

12 A Yes.

13 Q Next one is: HL&P commissioned the Quadrex
14 review to obtain an objective assessment of the status of
15 B&R's nuclear engineering and design activities.

16 A Well, you just talk about nuclear engineering
17 design activities. I agree that that was part of it. But
18 it was all engineering activities, if I recall, covered
19 just about every discipline.

20 Q Next one: The third party assessment of design
21 activities was sought in order to judge what improvements
22 were necessary to complete the project successfully as well
23 as to provide useful information regarding the status of
24 the project for discussions with HL&P management, the STP ,
25 co-owners and regulatory authorities.

1 A Could you read that again, Mr. Chairman.

2 Q The third party assessment of design activities
3 was sought in order to judge what improvements were
4 necessary to complete the project successfully as well as
5 to provide useful information regarding the status of the
6 project for discussions with HL&P management, the STP
7 co-owners and regulatory authorities.

8 A That's a valid statement, yes.

9 Q Next one is: The underlying purposes of the
10 Quadrex review were to assess whether B&R was in the main
11 stream of nuclear engineering practice, to evaluate B&R's
12 performance in areas in which there was reason to believe
13 that it might be experiencing difficulty, to assist in
14 benchmarking the status of the project and to identify
15 opportunities for improvement in B&R's engineering work.

16 A That's a truism.

17 Q A final one is: The principal focus of the
18 Quadrex report was on the sequence, stage of completion and
19 B&R management of design activities and not on design QA.

20 A Would you read that again, that sequence of
21 activities.

22 Q The principal focus of the Quadrex report was on
23 the sequence, stage of completion, and B&R management of
24 design activities and not on design QA?

25 A I have trouble with that sequence of activities.

1 Is that engineering activities or everything related to the
2 project.

3 Q Well, I'm just reading from certain statements.

4 A Okay. Would you read that one more time.

5 Q Yes. The principal focus of the Quadrex report
6 was on the sequence, stage of completion and B&R management
7 of design activities and not on design QA.

8 A Well, I guess we were concerned about the
9 sequential aspects of the design engineering activities and
10 the applications of successful completion and its true it
11 was not oriented to design QA.

12 Q Okay. That's all I have. Those statements all
13 came from various proposed findings that the Applicants
14 have proposed, in one case from a brief they filed. I just
15 wanted to see in light of further information, whether you
16 agreed or disagreed with those statements.

17 A Do I get a passing grade?

18 JUDGE BECHHOEFER: That's all the questions the
19 Board has.

20 MR. AXELRAD: Mr. Chairman, could we take our
21 morning break so we could look over our notes and decide if
22 we have any redirect?

23 MR. BECHHOEFER: Yes, why don't we take a 15
24 minute break

25 (Recess.)

1 JUDGE BECHHOEFER: Back on the record.

2 REDIRECT EXAMINATION

3 By Mr. Axelrad:

4 Q Mr. Oprea, I may not have heard one of the
5 Chairman Bechhoefer's questions precisely. But I thought
6 he asked you whether in connection with possible negative
7 results in the Quadrex report, you had considered or not
8 excluded the possibility that you would have to provide
9 portions of the report to the NRC and to the Board. Did
10 your response indicate that you thought there was a
11 possibility that you might have to provide something
12 directly to the Board?

13 A No, I was really focusing on the facts that
14 should there be any findings of sort that required us to
15 report them on a reportability responsibilities that indeed
16 we would report them as 50.55(e)'s. I did not really think
17 that we would be submitting any part of the report at all,
18 strictly responding to our reportability requirements.

19 Q And those -- how would those -- how would the
20 50.55(e) reports get to the Board?

21 A Well, we normally first make the report to the
22 Region IV and of course, I believe that we also notify
23 counsel of those particular activities and the counsel, I'm
24 talking of you and Mr. Newman, in essence would then convey
25 those.

1 Q Well, copies of everything that's provided by
2 HL&P to the -- that's filed by HL&P with the NRC staff
3 including Region IV, automatically get sent to the Board,
4 do they not?

5 A Yes, they do. You recognize that we reported and
6 then we have 30 days to decide based on our review whether
7 or not they are reportable or not reportable and then the
8 hard copy documents goes in.

9 AXELRAD: That's all we have, Mr. Chairman.

10 MR. SINKIN: We don't have any further questions,
11 Mr. Chairman.

12 RECROSS EXAMINATION

13 By Mr. Pirfo:

14 Q Mr. Oprea, is it fair to say that the reasons for
15 the independent third party review was a concern for how
16 far Brown & Root had got along in engineering on the
17 project?

18 A Yes, I think that's one attribute.

19 Q Is it fair to say that yourself and Mr.
20 Goldberg's impression of how far they got along was more
21 accurate than that of the Management Committee?

22 A I can't help but feel that the Management
23 Committee had a general overall concern that indeed they
24 were not as far along as they should be, and I don't think
25 that of necessity the way Mr. Goldberg or I felt as the

1 message conveyers.

2 Over time, the Management Committee had seen
3 where Brown & Root was not able to maintain the
4 productivity to meet the guidelines or the milestones that
5 were identified. And several times, we've had the
6 percentage of engineering that was completed vary, downward
7 mostly.

8 So I think there was a concern because you could
9 see through the number of meetings that we had, questions
10 were asked about what they were doing in certain areas and
11 how they're handling and when Brown & Root would identify a
12 problem they had in handling certain aspects of it. That
13 focused more and more concern from the owners' standpoint
14 on the engineering activities. So I believe that they had
15 a feel that perhaps it was not as far along as I feel sure
16 that Mr. Goldberg and I had a firmer feel, more positive
17 feel that they were not. And collectively the Quadrex
18 report indicated exactly for the most part where we were
19 and what we had to do.

20 Q And when these questions came up in the
21 Management Committee, is that when the independent third
22 party review was made known to the Management Committee?

23 A I really don't know how -- it could have been
24 part of our December 4th meeting, that if I recall, that
25 was under the label of reforecast. And reforecast covers

1 the engineering effort, the construction effort, budget,
2 schedule, et cetera. and that always intertwined together.

3 So I can't help but feel that it was as part of
4 that overall activity. Now, whether or not it was part of
5 the agenda or whether it was tied into agenda purposely or
6 fell out of that because of questions, I don't recall.

7 Q You used a phrase "fell under the label
8 reforecast." I'm not sure what you mean as a label in the
9 agenda?

10 A I believe it was 79, Exhibit 79, I thought that
11 was --

12 MR. AXELRAD: Exhibit Number 82, the second page,
13 Item II-E.

14 THE WITNESS: Yes. Item II-E says will know when
15 reforecast schedule gets out next month. That was
16 apparently a discussion of the reforecast activities that
17 were about to be undertaken.

18 Q (By Mr. Pirfo) I guess my problem was I was
19 under the impression you were unfamiliar with these agendas
20 at this point. But you have a specific recollection with
21 regard to reforecast scheduling.

22 A Well, I had the recollection by virtue of these
23 notes that Mr. Thrash took, that this report was being
24 given I presume by Mr. Barker who was our manager of the
25 project. They were talking about manpower, appraising it,

1 reforecast schedule, number of people are going to be laid
2 off prior to Thanksgiving, construction materials
3 supporting labor and and all that stuff.

4 Q Did you have a desire or feel and necessity to
5 downplay the import or the necessity for the independent
6 third party review when talking about it to the Management
7 Committee?

8 A To downplay the import of it, not that I recall.

9 Q But you view this as a very important
10 undertaking, something that was needed and Mr. Goldberg
11 wanted and you thought was wise and wanted conducted?

12 A Very same reason why we conduct management
13 assessments in other areas is to give us a current status
14 of an activity. And that indeed was the intent of the
15 third party assessment.

16 Q But that was not specifically stated to the
17 Management Committee as the chief reason. I asked you
18 early this morning, you said that you pointed out various
19 places where it could be interpreted as coming out, but
20 there's no place in these notes where the reason why you
21 wanted this independent third party review and you wanted
22 the committee to know about it was stated presented, set
23 forth, whatever you want to call it.

24 A Well, these notes don't represent the specific
25 words that were used in the dialogue to express the purpose

1 of the third party assessment. But I can't help but feel
2 that that was very clearly conveyed to the owners in regard
3 to what the need for that assessment was.

4 Q So you are saying that the need was clearly
5 presented, the notes simply do not reflect that
6 presentation?

7 A In all probability.

8 MR. PIRFO: May I have one moment. I have no
9 more questions, Mr. Chairman. Thank you, Mr. Oprea.

10 BOARD EXAMINATION

11 By Judge Bechhoefer:

12 Q Mr. Oprea, in responding to your counsels'
13 questions a few minutes ago, you indicated that you perhaps
14 had in mind that the Board would be notified by virtue of
15 50.55(e) reports. Did you mean to say that the Board that
16 you -- that the Board would not be notified under the
17 so-called McGuire doctrine no matter what the report
18 eventually showed?

19 A Well, at that particular point in time, I was not
20 familiar with the McGuire doctrine, I was familiar with the
21 responsibilities that we had for reporting information to
22 NRC and the Board. But in all truthfulness as I've
23 testified before, I never related the fact that the Quadrex
24 report even in its remotest way would have any bearing
25 whatsoever on what this Board was pursuing in Phase I

1 hearings.

2 And therefore, I felt that if there were any
3 discrepancies that showed up as a result of that third
4 party assessment that indeed required a reportability
5 action on our part, we would follow that responsible charge
6 which we did. I never thought about we had to take that
7 report in part or in toto and give it to the Board or
8 Region IV because I just didn't feel it was germane; that's
9 my feeling at that point in time.

10 Today I understand differently that perhaps the
11 Board felt that it should have been submitted to them
12 earlier. I still feel that we responded to the
13 responsibility we had under NRC requirements, and we
14 shouldered that responsibility and I think well.

15 JUDGE BECHHOEFER: That's all the Board has.

16 Mr. Axelrad, anything further?

17 MR. AXELRAD: Nothing further, Mr. Chairman.

18 MR. BECHHOEFER: Mr. Sinkin.

19 RECROSS EXAMINATION.

20 By Mr. Sinkin:

21 Q Just to talk to you for a moment on what Mr.
22 Pirfo was talking to you about, was the concern of the
23 Management Committee concerning Brown & Root's engineering
24 solely a forecasting, scheduling kind of concern or were
25 they also concerned that problems were arising in Brown &

1 Root's engineering, that the number of problems were
2 increasing, problems were staying on the agenda for a long
3 time without getting resolved; did they have those kinds of
4 concerns as well as the forecasting kinds of concerns?

5 A The concerns that the Management Committee had or
6 the owners of the project were always related to being able
7 to expeditiously complete that project within the schedule
8 and on budget and meeting the NRC requirements. And any
9 time they had a feeling that there was something about to
10 broach upon that ability on the part of the A/E contractor,
11 they got concerned.

12 They always stressed the import of "Let's get it
13 built as quickly as we can, get it licensed in accordance
14 with NRC requirements, and let's make sure we stay within
15 budget." These owners were getting terrific pressure from
16 there constituencies in their respective service areas and
17 their concern was getting it completed at the earliest date
18 possible.

19 Q When the third party review was presented to
20 them, was there any resistance to doing that study or any
21 criticism aimed at the idea of doing the study?

22 A Not that I recall, Mr. Sinkin.

23 MR. SINKIN: That's all I have, Mr. Chairman.

24 JUDGE BECHHOEFER: We have nothing more. Mr.
25 Axelrad.

1 MR. AXELRAD: No, more questions, Mr. staff.

2 MR. PIRFO: The staff has no more questions.

3 MR. BECHHOEFER: Mr. Oprea, you're excused. I
4 hope you have a nice trip back.

5 THE WITNESS: Same to you.

6 MR. AXELRAD: We will now call Mr. Barker. Since
7 he was sequestered, we'll have bring it to him. I think it
8 will take at least five minutes.

9 (Discussion off the record.)

10 JUDGE BECHHOEFER: Mr. Axelrad.

11 MR. AXELRAD: At this time, Applicants call as a
12 witness Mr. Barker who has previously been sworn.

13 DAVID G. BARKER

14 called as a witness on behalf of Applicants, having been
15 previously duly cautioned and sworn, testified upon his
16 oath as follows:

17 DIRECT EXAMINATION

18 By Mr. Axelrad:

19 Q Mr. Barker, will you please state your full name
20 for the record.

21 A My name is David G. Barker.

22 Q And what is your present position at Houston
23 Lighting & Power?

24 A I am general manager of corporate support
25 services.

1 Q What was your position at HL&P in 1980 and 1981?

2 A At that time, I was the HL&P project manager for
3 the South Texas Project.

4 Q During November 1980, did Mr. Goldberg discuss
5 with you whether a review of Brown & Root engineering for
6 the South Texas Project should be performed?

7 A At the time that Mr. Goldberg joined the company,
8 we had had a number of briefings and discussions with him
9 regarding all phases of the project, including engineering.
10 At that time, we were able to provide him with a general
11 overview of the status of engineering as we saw it, and we
12 did have discussions at that time about the needs to have a
13 overall design review of the engineering status of the job.
14 Brown & Root had been struggling on certain matters of
15 engineering and meeting the production schedule necessary
16 to complete the job. And in that time frame, we wanted to
17 get a good assessment as to what was involved in the status
18 of engineering and what was needed to complete the project.

19 MR. AXELRAD: Mr. Chairman, I would like to have
20 marked for identification as Applicants' Exhibit No. 85, a
21 document consisting of nine handwritten pages. I have
22 provided copies to the board and the parties and to the
23 court reporter.

24 (Applicants' Exhibit No. 85 marked
25 for identification.)

1 Q (By Mr. Axelrad) And I would like to ask Mr.
2 Barker: Can you identify for us what these nine pages
3 consist of?

4 A Yes. These are notes, excerpts from my notes,
5 that I took in the November time frame, 1980.

6 Q And do those notes mention among other things,
7 the consideration that was being given during November 1980
8 to the review of Brown & Root engineering?

9 A Yes. As I mentioned before, when Mr. Goldberg
10 came to work for the company, we had been providing him
11 with an overall briefing associated with all phases of the
12 project, of course including engineering.

13 And in these notes, you can see a collection of
14 the various types of things that we talked about, and of
15 course several sheets here do mention and refer to an
16 engineering design review.

17 Q And by about the end of November, did Mr.
18 Goldberg decide that this review of engineering should be
19 performed through a third party?

20 A Yes, that's correct. Let me add a little bit to
21 that. During the course of giving Mr. Goldberg a briefing
22 on the project, we had had several discussions about how
23 would an engineering review best be accomplished. And we
24 had discussions about whether Brown & Root should do this,
25 internally, whether Houston Lighting & Power Company should

1 do certain things.

2 Brown & Root ended up doing and continuing on,
3 of course, performing their own independent design review.
4 Houston Lighting & Power Company continued their own review
5 as well but it was decided by the end of November or
6 thereabouts, it might have been the first week in December,
7 but roughly in that same general time frame, that an
8 independent outside review would be conducted off project;
9 Dr. Sumpter, manager of nuclear engineering was to lead
10 that effort, and the Quadrex company, Quadrex Corporation,
11 was eventually selected as the firm to assist Dr. Sumpter
12 in that review.

13 Q And can you just repeat for me what was your
14 understanding of the purpose of doing this third party
15 review?

16 A Well, the purpose of conducting the review was to
17 determine the status of engineering and also to determine
18 whether Brown & Root had a sufficient understanding of some
19 of the important engineering issues facing the project and
20 what was sort of needed to complete the project.

21 Q Did Mr. Goldberg ever state to you that the
22 review of Brown & Root engineering should be undertaken in
23 order to prepare for the forthcoming NRC hearings for the
24 South Texas Project operating license?

25 A No.

1 Q Did you belief that the review of Brown & Root
2 engineering was being undertaken in order to prepare for
3 the NRC operating license hearings?

4 A No.

5 Q Did Mr. Goldberg ever state that the results of
6 the review of Brown & Root engineering would be useful if
7 engineering questions arose at the operating license
8 hearings?

9 A I don't have an independent recollection of
10 exactly what may have been stated there but I was generally
11 aware that Mr. Goldberg felt that if questions arose at the
12 licensing hearings in the future, wherever they may be,
13 that having this review conducted would be useful if
14 questions arose at those licensing hearings.

15 Q Were you present at the South Texas Project
16 Management Committee meeting on February 20, 1981?

17 A Yes, I was.

18 Q I would like to hand you a copy. Oh, you have it
19 in front of you, a copy of Applicants' Exhibit Number 81,
20 which are Mr. Thrash's notes of the Management Committee
21 meeting of that date.

22 A Yes, I have them.

23 Q Directing your attention to the first page, the
24 pages that's marked 2091 in the upper right hand corner, at
25 the time that's marked 9:35, there is an Item No. 6

1 "engineering review." Do you recall whether you were
2 making the presentation on that item at that time?

3 A I don't have a recollection or an independent
4 recall that I gave a presentation to the Management
5 Committee on that particular subject. But obviously from
6 these notes that Mr. Thrash had taken, there were some
7 comments and a briefing that was given to the Management
8 Committee at that time on the subject of the engineering
9 review, and it was customary at Management Committee
10 meetings that I would review some of the important issues
11 that were going on on the project.

12 Q And this was an item on your agenda for that
13 meeting?

14 A Yes. I would presume that based upon how the
15 notes were taken that it would be an item on the agenda.

16 Q Do you recall at that meeting mentioning the
17 schedule for the completion of the Quadrex review?

18 A Again, I don't have any independent recollection
19 that I stated the schedule of the review but obviously from
20 reading the excerpts from these notes, that a schedule of
21 April '81 was discussed.

22 Q Do you recall -- just below that, there is a
23 statement "Need to have info to meet licensing hearing
24 questions." Do you recall making such a statement?

25 A Again, I don't have any independent recollection

1 or don't recall making that statement. But perhaps, in
2 that particular statement, I was carrying forward a thought
3 that may have been expressed the previous day by Mr.
4 Goldberg that if questions arose at the hearings, having
5 the review completed could be useful in responding to those
6 questions.

7 Q And then just below that there is a statement
8 "There will be impact on '81 work plan but it's critical,
9 must be done." Do you recall making that statement?

10 A No, I do not recall making that statement or have
11 any exact independent recollection of it. Again, I do have
12 a general recall that Brown & Root was expressing concerns
13 that conducting this review at that time would dilute their
14 efforts on their '81 work plan for both engineering,
15 construction and procurement matters.

16 But nonetheless, Houston Lighting & Power Company
17 felt like it had to be done and we wanted to have it done
18 to find out the status of engineering. Therefore, it's
19 likely I would have reported that to the Management
20 Committee at that time .

21 MR. AXELRAD: Thank you, Mr. Barker. We have no
22 further questions, Mr. Chairman.

23 JUDGE BECHHOEFER: Mr. Sinkin.

24 MR. AXELRAD: Mr. Chairman, could we can off the
25 record for just one minute.

1 JUDGE BECHHOEFER: Yes.

2 (Discussion off the record.)

3 MR. BECHHOEFER: Okay, back on the record.

4 CROSS EXAMINATION

5 By Mr. Sinkin:

6 Q Good morning.

7 A Good morning, Mr. Sinkin, how are you doing.

8 Q Turning to first to Applicants' Exhibit No. 85,
9 the notes that you too. Would you I had for us, please,
10 Mr. Guerts as to who he was and what his position was at
11 this time?

12 A Mr. Guerts was the Brown & Root project manager
13 on the South Texas Project.

14 Q And are these notes of a meeting let's starts
15 with the 11-3-80 notes, is that a meeting between you and
16 Mr. Guerts alone or other people involved?

17 A Likely, that particular meeting was alone but I
18 can't recall. It could have been that one of my staff
19 members might have been with me and Jim Guerts may have had
20 one of his staff members with him, too.

21 I can give a little bit of help on that aspect,
22 that it was customary for Jim and I to meet weekly, and I
23 would sometimes jot down in my steno notebook some of the
24 items I want to talk to him about during the course of that
25 week and likewise he had a little list for me that he would

1 like to discuss.

2 Q Well then, are these -- let's deal first of all
3 with pages one, two, would it be your best recollection
4 that Page 3 relates to the 11-3-80 meeting?

5 A That's another meeting. We met, see it's 11-10,
6 it's a week later. 11-3, and 11-10.

7 MR. SINKIN: Can we go off the record for just a
8 minutes, Mr. Chairman.

9 (Discussion off the record.)

10 THE WITNESS: Okay, Mr. Sinkin, I'm sorry.

11 Q (By Mr. Sinkin) Okay. Let's try again. Looking
12 at Page 3, which at the top says "engineering concerns/need
13 plan," is that part of the November 3rd, 1980 meeting to
14 the best of your recollection?

15 A No, it's not.

16 Q It's not.

17 A It's not.

18 Q Okay. We will cine back to that page. Let's
19 deal with the first two pages then that we have. Page 1,
20 are those your notes prior to meeting with Mr. Geurts or is
21 that notes of your meeting with Mr. Geurts?

22 A Those notes are both, Mr. Sinkin. I would write
23 them out on my note pad, things I wanted to discuss. And
24 during the course of the meeting, I would add additional
25 notes.

1 For example, you take a look at No. 2, where I
2 said "engineering study and review" down to the right, it
3 says "Geurts is to report from Salterelli on engineering
4 resources 11-11-80." So I added some additional notations
5 just as a follow up on these notes when we were meeting.

6 Q And is Page 2 part of that same meeting or is
7 that a separate?

8 A That's a separate distinct listing. That
9 particular listing is a punch list as it's so labeled, of
10 things that I needed to take a look at during that
11 particular course and time associated with the project.
12 There's a broad issue of activities there, talk about QA,
13 repairs, documentation, manpower, overall design status,
14 turnover methodology, systems, so forth.

15 Q Let me ask you to just take a moment, if you
16 would, to look through Applicants' Exhibit 85 as it's now
17 numbered and tell me if, to the best of your recollection,
18 these pages are chronologically in order; in other words
19 they follow one after the other in time.

20 A Within reason. I can't recall. I would have to
21 go back and actually look at the notebook. But they're
22 probably pretty close. But I couldn't be exact,
23 Mr. Sinkin --.

24 Q Okay.

25 A -- until I looked at the notebook.

1 Q On page one --

2 A For example, I tell you what, for example, this
3 says "planning priorities and constraints," that sheet may
4 have been, you know, written in the back, very back of the
5 notebook where I may want to tear this sheet out later, for
6 a particular purpose or give it to my secretary to type up.
7 So it may not even be adjacent to this sheet. I don't
8 recall. I'd have to look at the notebook.

9 MR. AXELRAD: Mr. Chairman, if I may interrupt,
10 this might help both of your -- Mr. Sinkin, and Mr.
11 Barker's recollection. When we put this together, we did
12 put it together in the sequence in which it appeared in the
13 notebook.

14 THE WITNESS: That helps. Thank you you .

15 MR. AXELRAD: It's maybe in my orienting this
16 morning, I made a mistake but the intent was to have it in
17 sequence from the notebook.

18 MR. SINKIN: Thank you.

19 Q (By Mr. Sinkin) Starting at Page 1, Item No. 2,
20 as I read this item, it says, "Engineering study and
21 review, engineering audit, and implement procedure." Can
22 you tell me, are those three separate items that you
23 discussed with Mr. Geurts or intended to discuss with Mr.
24 Geurts or did you perceive them all as one item, being
25 numbered as one item?

1 A They are within the same general area. When we
2 were discussing this particular item, as best I can recall,
3 that Mr. Geurts and I had had a dialogue about the overall
4 need to conduct an engineering review to determined the
5 status of where we are on the project.

6 The project had not made much progress during the
7 previous several months because of the show cause order and
8 the various stop works that were issued and we wanted to
9 get a handle on where we were.

10 We had a reforecast in hand that talks about --
11 in fact, that's on Item No. 4 below it talks about baseline
12 forecast. Jim and I may have had some conversations about
13 well what are you after in an engineering audit? An
14 engineering study I, a review, statusing, a quantification?

15 We had not as yet at that time decided exactly
16 what was the overall scope of the engineering review, how
17 it was going to be conducted. We had, the project had
18 already had several with our on QA department as well as
19 Brown & Root, engineering procedure type audits where our
20 quality assurance organization would come in and audit the
21 engineering activities against the procedures.

22 Therefore, the labeling of engineering study and
23 review, engineering audit and as you notice I drew a line
24 down to -- I said "Ulrey audit;" Bob Ulrey was the manager
25 of quality assurance at that time and I probably wrote some

1 notes down that say "Well, an Ulrey audit would be looking
2 at adherence to procedures, what is wrong with those
3 procedures and so forth, have they met commitments,
4 adequacy of the record of design, process design
5 verification," and evidently I wrote down a note here about
6 design freeze. I don't know why I would have put that
7 under audit.

8 But the label audit is sometimes misconstrued as
9 to where you're going to do an audit versus a review. And
10 Jim and I more than likely were having some dialogue along
11 those lines.

12 During the course of November, Houston Lighting &
13 Power Company as an I answered to Mr. Axelrad earlier, had
14 decided irrespective of what Brown & Root was doing for
15 their engineering review, we would conduct an independent
16 review off project, to determine the status of engineering.
17 That Brown & Root nonetheless continued on with their
18 internal reviews as well as our engineering organization on
19 the project for Houston Lighting & Power Company would
20 continue during their review, specifications, drawings, et
21 cetera.

22 Q When you use the term "off project," are you
23 referring to a third party as opposed to people on the
24 project or are you referring to off site?

25 A In this particular case, it's both. When we say

1 "off project," we meant that the people who are responsible
2 for the job on a day-to-day basis are considered project
3 personnel.

4 People who are not assigned to the project
5 full-time in this case Dr. Sumpter was not assigned to the
6 project full-time, he would be considered off project and
7 therefore not responsible for day-to-day activities. And
8 in the case where we did retain Quadrex to do the review,
9 it's also third party.

10 Q Turning to Page 2, "planning priorities" page,
11 Item No. 1 says "QA liabilities" and then there's a
12 handwritten note above that, "equipment review." Can you
13 elaborate on what that item was meant to convey?

14 A "QA liabilities" likely were associated with all
15 the NCR's that may have been on the project, the show cause
16 commitments. "Equipment review" probably was referring to
17 the what we call our vendor control program where we were
18 going back and reviewing all the equipment that had been
19 ordered.

20 Q Item 7 says "engineering assurance review." Is
21 that similar to the engineering study or review that you
22 had discussed with Mr. Geurts on November 3rd?

23 A It's related to that. It has a separate listing
24 there, engineering assurance review being No. 7 and then 11
25 being "overall design status."

1 Again, early in November, we hadn't decided <-D>
2 exactly how we were going to separate out ongoing project
3 type review matters statusing it versus having an
4 independent design review to assess where we are. I can't
5 add anything else to that, Mr. Sinkin.

6 Q All right. So Item 11 would be more closely
7 related to the engineering review you would discuss with
8 Mr. Geurts?

9 A No, not necessarily. I would say that 7 and 11
10 relate to both No 2 on the previous page. Again, it had
11 not been determined exactly how we were going to go about
12 it.

13 Q Page 3, to the best of your recollection, is this
14 your notes to yourself or your notes of a conversation?

15 A These are notes to myself. These are, again, a
16 punch list of items I may have jotted down at some evening
17 or after some meeting I may have attended at that time
18 frame.

19 Q Could you read for me the sentence or the line
20 that starts with "objective, is to be" -- I can't quite --

21 A "Is to be able to procure and install, and
22 construct with low risk."

23 Q Thank you. And Page 4, the meeting with Mr.
24 Geurts on the 10th of November, about the 7th line, you've
25 written systematic weakness. Can you tell me what you were

1 referring to as a systematic weakness.

2 A Probably -- I can't recall exactly. It may have
3 resulted from the fact that we need an overall tracking
4 system and it may have been a weakness that we didn't have
5 an overall one, we probably had isolated individual ones
6 and we wanted a better collection of these and wanted a
7 weekly follow up.

8 Q How would you relate that answer to the idea that
9 if Brown & Root couldn't do a more comprehensive one, HL&P
10 would be faced with a tough decision; is what you record in
11 your notes?

12 A That particular aspect, I was probably referring
13 to the fact that if Brown & Root didn't come up with an
14 overall system, Houston Lighting & Power Company would be
15 forced to come up with one. And we were having some
16 difficulty sometimes with Brown & Root being responsive and
17 that was probably not the best posture for the two firms to
18 get into at that time.

19 Q When you use the term "commitments" in this item
20 one, what commitments, to whom?

21 A Commitments to ourselves, commitments to the
22 safety analysis report that were commitments that you made
23 in those documents, design requirements, 50.55(e)
24 commitments on follow up schedules, construction
25 commitments, procurement activities. You notice I made the

1 note "all commitments." And that's an all inclusive thing,
2 whatever it may be, whatever the liabilities would be on
3 the project, whether they be administrative in nature, or
4 technical or regulatory, we wanted an overall tracking
5 system consolidated and we wanted weekly follow-ups on
6 those commitments.

7 Q You testified that Brown & Root proceeded to do
8 an engineering design review, HL&P continued on with their
9 activities and the third party was hired. I see item three
10 own this page, "Design review status at monthly meetings,
11 place in monthly report." Which design review would you
12 have been referring to on November the 10th?

13 A This would would have been Brown & Root's design
14 review. In other words, whatever Brown & Root was doing,
15 if they choose to do a systematic design review, we wanted
16 that plan written down and we wanted a monthly report on it
17 combining the normal monthly report we sent to the
18 Management Committee so they would have the opportunity to
19 see the progress of that matter on a month to month basis.
20 That would be a charge that I would have given to Brown &
21 Root.

22 Q Turning to the 6th page, which should say
23 "planning prerequisites" at the top.

24 A Yes.

25 Q Okay. The first item says, "Removal to the

1 degree possible outside constraints influences." Can you
2 tell me based on your review of these notes, what outside
3 constraints and influences you were referring to?

4 A I can't recall what those may have been. I could
5 only speculate.

6 Q Could you read for me Item A, under one?

7 A "Reduce unnecessary management reporting
8 meetings, justifications, matrix management, project move."

9 Q Can you tell me what "project move" means?

10 A "Project move" is probably we were going to move
11 the project, Houston office that was in Brown & Root's
12 office at Clinton Drive out of that building.

13 Q Item 3 states, "Develop clear understanding of
14 problems deficiencies and action necessary," and then it
15 lists three areas, QA program, construction procedures and
16 the engineering design. Was it envisioned at this time of
17 the 14th of November that the design review -- let me back
18 up a little. By this time, 14th of November, had you
19 discussed having the third party review?

20 A I can't recall. I what I could generally recall
21 is by the end of November, that decision had been made.
22 But 14th is probably a little bit early on my recollection
23 at that time.

24 Q But in discussing the design review that would be
25 made, was it to look at developing a clear understanding of

1 problems, deficiencies and actions necessary in
2 engineering? Is this item related to the potential review,
3 I guess is my real question?

4 A No, this is much broader, Mr. Sinkin. This list
5 is, again, a project manager's attempt to corral all the
6 issues that are necessary to get this project moving ahead,
7 the QA program, construction procedures. We were deeply
8 involved in a restart program from the show cause order and
9 the stop works that had been in force for awhile. And were
10 busily developing and revising our construction procedures
11 and working with the Region IV office on a restart program.
12 Engineering design is a feed into your construction
13 process.

14 Q Turning to Page 7, Item No. 3, the engineering
15 plan for review of design, I think that says, "What we want
16 to do is different." Is that correct?

17 A Yes.

18 Q Was that related to the engineering design that
19 was ultimately performed by Quadrex?

20 A No. I believe that this particular notation
21 refers to Houston Lighting & Power Company's role. When
22 Mr. Goldberg first came on board, he was not accustomed to
23 what utility engineering firms normally did for review of
24 the architect engineering -- the architect engineer's
25 activity. He may have been familiar with other utilities

1 that he worked for but he wanted to get a better idea of
2 what Houston Lighting & Power Company did.

3 And during the course of that month of November,
4 we were giving Mr. Goldberg briefings on what we were
5 doing, how we did it, and generally an overall role that we
6 were doing.

7 And this was probably some question, is that "Is
8 what we want to do something different?" And that was just
9 a question that I noted at that point in time, as probably
10 a list of things that I was discussing with Mr. Goldberg as
11 well as my staff.

12 Q So these would be different things that HL&P
13 would do in the future regarding the review of design?

14 A To the the best of my recollection, that's what
15 that particular phrase would mean.

16 JUDGE BECHHOEFER: Mr. Barker, is this page of
17 your notes related in date sequence to the November 14,
18 1980 which appears on the previous page?

19 THE WITNESS: I didn't understand your question.

20 JUDGE BECHHOEFER: Is Page 7, is that
21 approximately the same date as Page 6?

22 THE WITNESS: I would say it's close. It could
23 have been the 15th. Again, these are just some independent
24 notes of things I need to follow through on or consider for
25 future reference in managing the project.

1 Q (By Mr. Sinkin) On the 9th page of your notes,
2 Mr. Barker, Item No. 1 says, "Need plan for engineering
3 design review." And then you have 6 items listed under
4 that. Can you tell me which if any of those 6 items
5 related to what ultimately became the Quadrex review?

6 A I would say No. 6 would come close to that. The
7 term engineering assurance review, remember Mr. Goldberg
8 and I in the discussion we had in November were learning a
9 lot about one another and what our experiences had been and
10 the label that you give certain activities and actions.
11 And I remember in general that we were talking about, you
12 know, the terms "engineering review, engineering status,
13 engineering assurance review, engineering audit," those
14 things were a little bit muddled as to, you know, what you
15 were driving at.

16 I think by about that point in time, the term
17 engineering assurance review in Mr. Goldberg's mind and my
18 mind where eventually what Mr. Goldberg has put into place
19 on the nuclear program at HL&P that Mr. Frazar's heading up
20 as an independent assurance design review activity. And I
21 think that probably what happened here was says "assignment
22 to _____," Mr. Goldberg and I was probably discussing
23 that we need to assign this activity to one person, and it
24 was probably not uncommon at that time that Mr. Goldberg
25 asked me, said "Mr. Barker, who do you want to assign that

1 to, who do you recommend."

2 And we were probably, with all those six items
3 above, probably determined out that one person couldn't do
4 that. Dr. Sumpter ended up doing No. 6 through the
5 Quadrex review. Again that's the best of my recollection,
6 because clearly items one through five weren't all done by
7 Quadrex under Dr. Sumpter. Portions of of them to some
8 extent but clearly not all of them.

9 Q Well, turning back to Page 2, I believe the
10 record would reflect that when I asked you whether Item 7
11 on Page 2 was related to the Quadrex study, you said that
12 that would not have been. Is that just a problem of
13 nomenclature at a particular point in time or --

14 A I would say so, Mr. Sinkin, this likely was say
15 was 11-3 or 11-4, as I just mentioned previously, that the
16 labeling of terms and terminology hadn't quite been
17 synchronized, I guess is the proper word, and I think even
18 back on page one where I drew a line down to Ulrey audit,
19 you know, what is it that you mean when you say engineering
20 assurance; what does it mean when you talk about
21 engineering audit, design status and so forth.

22 I think Mr. Goldberg came to work for the company
23 on October 20th, I believe. And by that time, we were
24 starting to work a little bit closer together, around we
25 were still filling out labels and terminology.

1 Q As the term ultimately came out, the engineering
2 assurance review, Item 6 on Page 9, the one that came
3 closer to the Quadrex review, what was your understanding
4 of what an engineering assurance review would be.

5 MR. AXELRAD: May I just get a clarification of
6 that question or are we now speaking about what was his
7 understanding of the third party review that was undertaken
8 or some broader engineering assurance review ?

9 MR. SINKIN: Well, maybe they're two separate
10 questions.

11 Q (By Mr. Sinkin) Let me ask first of all, in this
12 Item 6, the term engineering assurance review, at about
13 this time, November the 14th, 15th, in that period of time,
14 what was your understanding of what an engineering
15 assurance review would be?

16 A Gosh, Mr. Sinkin, looking back on at --- say at
17 that date, engineering assurance, I would have thought that
18 it would have an comprehensive review, similar to what is
19 currently now being done on the project. But I can't say
20 for sure, that's really speculation because I don't know
21 all that was in Mr. Goldberg's mind when he may have
22 mentioned that term engineering assurance. I don't know
23 what he had in his mind.

24 When somebody says those words to me, I can
25 conclude what it means to me but I don't know what Mr.

1 Goldberg had in his mind at the particular point in time.
2 But I know what Quadrex did is not what Mr. Frazar's doing
3 today with his organization. Now, whether Mr. Goldberg was
4 thinking along the same lines at that time, I don't know.

5 A Again our objective was with Quadrex was to get a
6 handle on the status of engineering, in a broad, you know,
7 a broad sense

8 Q And it was in November of 1980 that Mr. Goldberg
9 was discussing with you a review of engineering?

10 A Yes.

11 Q And did he talk about that in terms of a two to
12 three week quick review?

13 A At that point in time, I don't know if we did
14 discuss the length of time that review would take. A two
15 or three week review of engineering is an ambitious
16 undertaking. That is not a very lengthy time to conduct a
17 detailed review from a project manager's standpoint, and
18 most of my thinking back in September as well as through
19 this point in time, was that I wanted a comprehensive
20 review of the status of engineering and I think that Jerry
21 and I by the end of November said that -- and also
22 understanding what Brown & Root was doing themselves -- was
23 that that's not really what we want, that wasn't necessary,
24 he wanted a quick independent third party review to satisfy
25 himself about the status of engineering, the project team

1 had been deeply involved in the project for a number of
2 years. I think Mr. Goldberg wanted to have an independent
3 unbiased opinion of the status of engineering and again
4 that's the reason why we assigned an off project manager,
5 Dr. Sumpter, to lead that effort.

6 And my role in Quadrex then was to support Dr.
7 Sumpter in coordination and executing of that review once
8 Quadrex was selected and they came in to Brown & Root's
9 offices later on in the spring of '81.

10 Q When you use the term "status of engineering,"
11 does that encompass a quality component as well as a
12 quantity component?

13 A I would say that the answer is no. I would say
14 that I had no question at that time of the quality of Brown
15 & Root engineering.

16 My concerns were addressed towards the production
17 side, that they weren't getting it out. We had not
18 questioned the quality or technical adequacy of their
19 engineering at that time. We -- the problem was that the
20 engineering wasn't getting out the door.

21 So at that time frame, the status would have
22 meant more of a quantification of, to some extent, was
23 Brown & Root doing the right type of -- were they
24 addressing the right engineering issues in that time frame,
25 was there something that they were supposed to be doing in

1 engineering design that they were not yet doing; and the
2 dovetailing of the various engineering elements that feed
3 into other engineering activities, eventually release to
4 construction.

5 Q That would be things related to the sequence?

6 A Well, not only sequence, but also just getting
7 the engineering information out the door, you know, to
8 vendors, review and approval of various vendor submittal
9 drawings, and interfacing with construction as well, too.

10 Q During this period of time, let's say the latter
11 half of 1980, did you regularly attend the Management
12 Committee meetings held by the partners?

13 A Yes. I think without exception during my tenure
14 as project manager for almost six years, I had never missed
15 a management committee meeting.

16 Q During this period of time, latter half of 1980,
17 were there a series of engineering problems presented to
18 the Management Committee that grew out of Brown & Root's
19 work?

20 A Most of the problems that we have presented to
21 Management Committee along with engineering would have
22 primarily dealt with the status from a quantification
23 standpoint, and getting that information to the field for
24 construction purposes.

25 Needless to say, if we had some a 50.55(e) item

1 that was presented to the Management Committee, for example
2 I believe we had a 50.55(e) on some beam to column
3 connections on some structural steel inside containment,
4 were some temperature currents weren't properly taken into
5 account, periodically that item would have been reported to
6 the Management Committee, our status of working that item
7 off. But that was, you know, a unique single item that we
8 would report on. TMI, you know there was a list of "to
9 do's" from TMI, which part of that is in engineering. And
10 we would periodically review that matter with the
11 Management Committee.

12 Q But during the latter half of 1980, were there an
13 increasing number of equal problems, let's say 50.55(e)
14 type problems, stemming from engineering work done by Brown
15 & Root that were brought to the attention of the management
16 committee?

17 A I'd have to get back and refer to my other
18 detailed notes of the project or project review meeting
19 minutes or the progress reports to answer that question,
20 Mr. Sinkin. There may have been.

21 Q Let me just ask for your overall impression at
22 this time. Was there an increase in the number of problems
23 in engineering at Brown & Root, putting aside for the
24 moment the productivity, the problems that would be a
25 50.55(e) kind of problem, in the latter half of 1980?

1 MR. AXELRAD: Mr. Chairman, the witness has just
2 answered that he didn't recall and would have to look at
3 his notes in order to be able to answer that type of
4 question. That's exactly the same question that was asked
5 before.

6 MR. SINKIN: I asked a general impression as
7 opposed to specific knowledge. Was it his overall
8 impression from those meetings.

9 JUDGE BECHHOEFER: Overrule the objection. I
10 think you can answer.

11 A I would say no. I think our principal problems
12 with at that time were the production side of Brown & Root.
13 That doesn't mean that we didn't have an item that might
14 have been reported under 50.55(e) that may have been
15 covered at that point in time. I don't recall Mr. Sinkin
16 without going back and reviewing detailed project reports.

17 Q Let me ask you to turn to Applicants' Exhibit 79,
18 it's the December 4th, 1980 minutes -- notes.

19 A Okay.

20 Q If you will turn to the second page, that has
21 2052 at the top?

22 A Okay.

23 Q And the time in the left March margin, 3:10?

24 A Okay.

25 Q It appears that Mr. Hancock has referred to a

1 remark at a November meeting by Mr. Goldberg regarding
2 going slow in engineering. Can you tell me what Mr.
3 Goldberg had told the Management Committee in November of
4 1980 about going slow in engineering?

5 A I don't recall any, you know, exact discussions
6 on that particular matter. But you know, catching a few
7 excerpts of Mr. Thrash's notes here, perhaps by that point
8 in time, that Mr. Goldberg had been able to get an
9 impression about the status of engineering and that we were
10 having trouble getting that engineering out the door and
11 that he was informing the Management Committee of that
12 fact.

13 Q Can you link that at all with the following line
14 that says reverification question mark?

15 A I can only speculate, you know, what that word
16 means, reverification in the context of what was being
17 discussed there. I don't recall exactly.

18 Q In your discussions with in Goldberg in November
19 of 1980 regarding a design review, was the concept of
20 reverifying what Brown & Root had already done a part of
21 the considerations of that kind of review?

22 MR. PIRFO: I think I'll introduce an objection,
23 I thought he said he could only speculate as to what the
24 meaning of --

25 MR. SINKIN: I'm not on these notes. I'm saying

1 in his discussions with Mr. Goldberg in November of 1980
2 about the possibility of a design review, was the concept
3 of reverifying the work Brown & Root had already done a
4 part of those discussions.

5 MR. PIRFO: The problem I have is that we're
6 talking about the concept of reverification and I don't
7 think the concept, the witness has stated he would be
8 speculating as to the finding of reverification in the
9 context of the notes and the next question goes on to
10 define the concept of reverification, and I don't think we
11 have a definition of reverification, unless I'm missing
12 something.

13 Q (By Mr. Sinkin) When I asked you about the
14 "reverification question mark" in these items, were you
15 responding that you had no recollection of what that was?
16 I think my question was could you link reverification to
17 the "going slow" and then you said you could not link those
18 two things. Does the term reverification have any meaning
19 to you?

20 A No. I mean, well, of course it has meaning to
21 me. But in the context of these notes, I don't recall --

22 Q Okay.

23 A -- if this would have been discussed at those
24 meetings. I don't know what that means. I notice there's
25 a question mark between the word reverify, and I don't know

1 what that means in Mr Thrash's notes, if he heard that word
2 right or what that may have meant to him or what he heard.

3 Q Let's move away from the notes. Let's go back to
4 the discussions you were having with Mr. Goldberg in the
5 November time frame about doing a design review of Brown &
6 Root. In those discussions, was -- I don't want the use
7 the "reverification" word, but was a concept similar to
8 that, that is was going back and looking at what Brown &
9 Root had done had been done correctly part of that
10 discussion?

11 A I would say no.

12 Q Turning to this Applicants' Exhibit 79 down at
13 the 3:10 in the afternoon, records Mr. Goldberg as saying
14 that he thinks construction errors will raise engineering
15 questions. Do you know the context in which those
16 engineering questions would have come up?

17 MR. AXELRAD: Mr. Chairman, I think I will object
18 to that question. At the very least, he has to ask the
19 witness whether the witness has any recollection of that
20 particular sentence or any understanding of this meeting.

21 Q (By Mr. Sinkin) Do you have any recollection or
22 understanding of that particular remark by Mr. Goldberg?

23 A No, I don't have any recollection, Mr. Sinkin, of
24 that remark.

25 Q Did you and Mr. Goldberg in the November period

1 discuss the possibility that the construction errors that
2 had been found in Brown & Root's work might stem from
3 engineering causes?

4 A I can't recall any discussions on that. But you
5 know in construction if you do have some difficulties, it
6 could stem from several areas. Perhaps there's an
7 interference that has to be worked out by engineering. And
8 you provide that feedback to engineering and they come
9 through with a change that allows for the construction
10 progress to continue.

11 Q During this period of November, December, 1980,
12 were you involved at all in the preparations for the Phase
13 I licensing hearing?

14 A Only from a support standpoint. Our licensing
15 organization would have the primary role for preparing for
16 those types of hearings in that time frame. I think that
17 not very much was known as to all that needed to be done
18 for that. I think that probably came late4r on in January
19 and February. But again I can't recall exactly, Mr.
20 Sinkin.

21 Q When you were doing your initial briefings of Mr.
22 Goldberg when he came to HL&P, did you discuss with him the
23 licensing hearings?

24 A I can't recall discussing with him licensing
25 hearings. However, as best I can recall from a general

1 sense, that there -- the hearings were to be scheduled in
2 the future. I think even in fact, the month of November
3 there might have been a prehearing conference. And the
4 schedule hadn't really been set yet from probably from a
5 general standpoint of schedule, we may have discussed it
6 but I don't have any independent recollection of what all
7 we did discuss.

8 Q Did Mr. Goldberg ever express to you his thoughts
9 that there might possibly be questions on engineering in
10 the Phase I licensing hearings because of the construction
11 problems that had occurred in the project?

12 A No. I don't recall any discussions along those
13 lines.

14 Q Do you have any recollection of the parenthetical
15 remark on Page 2052 that we've be looking at of these
16 notes, "Need overview by more experienced engineers then
17 can proovide strong testimony at OL hearing"?

18 A I don't have any recollection of those words, Mr.
19 Sinkin.

20 Q There's another remark off to the side,
21 "identifying outside engineers now." Were you involved at
22 all in identifying the outside third party engineers who
23 would perform a design review of Brown & Root?

24 A No, I was not involved. That was a charge that ,
25 was given by Mr. Goldberg to Dr. Sumpter. I was aware of

1 the eventual selection when it was made, and that was all.
2 My role, I had nothing to do with the review of their
3 qualifications or their selection, only the information
4 that came out of it.

5 Q Then your best recollection as to what point in
6 time Dr. Sumpter was given that charge is?

7 A In the November, first part of December, that's
8 the best of my recollection.

9 Q At the bottom of Page 2052, GO seems to be Mr.
10 Oprea, is recorded as stating "The NRC may make a major
11 inspection early next year." Do you remember that
12 particular remark and what it refers to?

13 A No, I don't. I could only speculate.

14 Q If you will turn to Applicants' Exhibit 80, the
15 second and third page should have 81037 at the bottom.

16 A Okay.

17 Q There's a remark attributed to Mr. Oprea, where
18 in February -- the date of these notes is February 19,
19 1981. There's a remark attributed to Mr. Oprea right near
20 the bottom of the page that "As late as last Friday, tried
21 to do end run around and avoid whole thing" question mark.

22 The context is the Quadrex study being performed
23 on Brown & Root. Do you have any knowledge of a Brown &
24 Root effort in February of 1981 to do an end around and
25 avoid the Quadrex study?

1 A I don't have any independent recall on that.
2 However just from a general standpoint, I do know that
3 Brown & Root did not want this review conducted because it
4 would impact and dilute their '81 work plan activities.
5 And using this term "end around," I think that Mr. Oprea
6 may have been referring to the fact that maybe one of their
7 senior officers may have contacted him and had tried to
8 influence him into maybe delay this review because Brown &
9 Root didn't feel like this was a good time to do it because
10 they were busy doing other things.

11 Q I'm sorry.

12 A That's just a speculation, the best I can recall
13 it may have been the meaning of these notes.

14 Q Did Mr. Oprea ever tell you that he had been
15 contacted by anyone at Brown & Root to have the report, the
16 Quadrex study delayed or called off or anything of that
17 sort?

18 A I don't recall if Mr. Oprea mentioned that to me.
19 It would not have been unusual if he did. I don't recall
20 it.

21 Q Prior to being sequestered, Mr. Barker, did you
22 have occasion to sit down with Mr. Oprea and go through
23 line by line these notes and try and refresh your
24 recollection as to the events that took place that are
25 recorded in these notes?

1 A No, we did not.

2 Q Do you have any basis for your speculation that
3 Brown & Root personnel contacted HL&P and requested a delay
4 or a cancellation of the Quadrex study?

5 A Do I have any basis for that?

6 Q Yes.

7 A I think the basis is the fact that any
8 organization has management structure and in that
9 management structure, you have top executive management who
10 have responsibility of overseeing the activities of people
11 they are assigned the various contracts. And Brown & Root
12 had that. Brown & Root executive management, top executive
13 management, had frequent contacts with our executive
14 management during this particular time frame, probably more
15 so than they had at any other time. And it would not have
16 been unusual for them to have voiced to Mr. Oprea their
17 feelings that this was not a good time to conduct this
18 review because it was impacting their other work. That
19 would be the basis of my speculation.

20 Q Well, over the last month, have you discussed
21 that particular topic with anyone in particular, as to the
22 idea that Brown & Root senior personnel may have contacted
23 Mr. Oprea to get Quadrex delayed or called off?

24 A No, not at all.

25 Q When, to the best of your recollection, was the

1 first time that you heard the Quadrex study or the Quadrex
2 report linked to the Phase I hearings in any fashion at
3 all?

4 A I think two weeks ago when Maurice Axelrad
5 contacted me and told me that it's likely I would be
6 participating in this hearing on that subject and he would
7 be sending me some information. He asked me to pull out my
8 notes of in the past and we started the preparatory phases of
9 being able to participate in this hearing.

10 Q Let me ask you to look at Applicants' Exhibit 81.
11 Would I be correct that Item No. 6 on the first page was a
12 presentation that you made?

13 A Yes.

14 Q Do you have any recollection as to what the basis
15 for your statements that the Quadrex study was needed to
16 have information to meet licensing hearing questions, what
17 the basis of that remark by you would have been?

18 A As I answered Mr. Alexrad's question earlier, I
19 had said I don't have any independent recollection of that.
20 But I was generally aware that Mr. Goldberg had had a
21 feeling that if licensing questions arose at the hearing,
22 we'd be better prepared to answer those questions if this
23 review that we were conducting was completed.

24 Q How would you have been aware of that feeling by,
25 Mr. Goldberg?

1 A I think the previous day, I think it was February
2 19th, Mr. Goldberg had some statements generally to that
3 effects.

4 Mr. Sinkin, I think it was a difference between
5 preparing for the hearing and being able to respond to
6 questions. And I think Mr. Goldberg wanted to be in the
7 best possible position to respond to questions.

8 Q Can you show me in the notes of the day before,
9 February 19th, where it is recorded that Mr. Goldberg said
10 that the Quadrex study might be needed in terms of
11 providing information to the licensing hearings?

12 A I think on that page, 81037, under 3:10, where
13 under "Hancock" there may have been some question that
14 Hancock asked Mr. Goldberg on affect on OL hearing of an
15 adverse audit, Mr. Goldberg may have made a statement
16 saying "Can only disclose and explain solutions." That's
17 where I would surmise likely heard the comment that Mr.
18 Goldberg wanted to be capable of responding to licensing
19 hearing questions that I made on the next day.

20 I think related to that on December 4th, I don't
21 recall -- I don't recall it, there are some words to that
22 effect on page 2952, where I think, Mr. Sinkin, you read
23 that earlier, "overviews by more experienced engineers then
24 can provide strong testimony at OL hearing."

25 I think that's the same type of theme, that I

1 would have generally got some idea from from Mr. Goldberg,
2 to respond to questions.

3 Q Did you and Mr. Goldberg ever actually discuss
4 whether the Quadrex study would be related to Phase I
5 issues?

6 A I do not recall any discussions along those
7 lines; my only recollection can be somewhat surmised from
8 what I read her in these notes of Mr. Thrash.

9 MR. SINKIN: That's all I have, Mr. Chairman.

10 JUDGE BECHHOEFER: Mr. Pirfo.

11 MR. PIRFO: That you, Mr. Chairman.

12 CROSS EXAMINATION

13 By Mr. Pirfo:

14 Q Mr. Barker, we've not met. I'm sure you know I'm
15 the attorney from the NRC Staff. My name is Mr. Pirfo. I
16 let you know that out it courtesy so you know who you're
17 talking to. Mr. Barker, you said you were at all these
18 meetings, correct?

19 A Yes, the best of my recollection, I was at all of
20 them. You know, I made a broad statement awhile ago.
21 There may have been one or two I missed. I but I don't
22 recall it. I always made a point to schedule my matters
23 around the Management Committee meetings.

24 Q I didn't mean all, I simply meant these three,
25 79, 80 and 81.

1 A Well, yes, I think my name is mentioned her on
2 some of the items so the best I can recall, I was.

3 Q What was your role at these meetings?

4 A My role at the meetings was to present to the
5 Management Committee a report on the overall status of the
6 project.

7 Q Okay. With regard to the third party independent
8 engineering review, what was your role with regard to that
9 specifically?

10 A In regard to that action, that function? My role
11 was to support Dr. Sumpter and the contractor that was
12 selected to work with them, which was eventually Quadrex,
13 in carrying out the review and scheduling the work of our
14 on engineers and interfacing with the Brown & Root project
15 management organization in scheduling their engineering
16 personnel to work with Quadrex and Dr. Sumpter.

17 Q I stated my question a little poorly. At the
18 Management Committee meeting.

19 A At the Management Committee meeting, I would be
20 reporting on that subject and the activities associated
21 with that activity.

22 Q So did you report on the reasons for this review
23 as well, the need for this review? I draw your attention
24 do Applicants' Exhibit 81, down by 9:35, at the first page,
25 of Applicants' Exhibit 81.

1 A Yes, I would have likely according to these
2 notes, recorded what was is the reason, the purpose of
3 conducting in review.

4 Q Where is that reason stated if anywhere in these
5 notices?

6 A I think that's sort sort of implied with the
7 notation "Need independent review of Brown & Root
8 engineering." The independent review would allow us to
9 assess the status, in an independent unbiased matter, the
10 status of engineering. That was the purpose of the review.

11 Q But this allowing us to assess the status, that
12 is not shown here, the need is shown, am I correct, but the
13 reason for the need is not shown.

14 A Yes.

15 Q Okay. What do you attribute, if you have any
16 idea, to what do you attribute the fact that the reason,
17 the main reason, or primary reason, however you want to
18 characterize it, is not shown?

19 A I don't know why Mr. Thrash did not mention that
20 in greater detail in his notes. But I do know the reason
21 why, because I was project manager of the project and was
22 involved in a whole host of activities, and the purpose was
23 to determine the status of engineering on the project so
24 that we could move forward and complete the project.

25 Q Was this purpose stated to the Management

1 Committee, to the best of your recollection?

2 A To the best of my recollection, it would have
3 been reported to the Management Committee.

4 Q So it was reported to the the Management
5 Committee but failed to get nto the notes, is that what
6 your testimony is today?

7 A If you'll read that in the notes, then I would
8 have to agree with you. But from the first statements
9 there, "Need independent review of Brown & Root
10 engineering," I know what that means to me in the context
11 of what was going on at that time on the project, and from
12 my own notes, that I had recorded at that point in time.

13 Q Maybe the problem we're having is that I see a
14 distinction between a need and the reason for needing it.
15 You needed the independent review because you wanted a
16 benchmark, a status.

17 A Yes.

18 Q Okay. I'm divorcing those two concepts. All I
19 see here in the notes is the first part, the need. I don't
20 see the reason for the need.

21 A I would agree with you. If you want to separate
22 those two, the reason is not stated.

23 Q What was Dr. Sumpter's position at the time he
24 were assigned to support his function in regard to this
25 engineering review?

1 A I believe Dr. Sumpter was manager of the nuclear
2 engineering and services department.

3 Q Was what his full title at that time, if you
4 know?

5 A I don't know. I think from a functional
6 standpoint, that's close to what his job was.

7 Q Was it ever brought to your attention or did you
8 hear it through Dr. Sumpter or anybody else at HL&P or any
9 source at all, why Dr. Sumpter was put in charge of that,
10 irrespective of the --

11 A Well, Dr. Sumpter was not assigned to the project
12 full-time. He assigned engineers to work on the project.
13 He had other engineers working for him that were not on the
14 project and from a classic standpoint of an engineering
15 construction organization that had responsibility at that
16 time for two nuclear power plants, both Allens Creek and
17 South Texas, Jim would be the logical candidate to assign
18 that task.

19 MR. PIRFO: I have no more questions. Thank you,
20 Mr. Barker.

21 MR. AXELRAD: Mr. Chairman, I had neglected
22 before, when I reorganized all the pages of Exhibit No. 85,
23 to move the admission of Applicants' Exhibit 85 into the
24 record and I would like to do so at this time.

25 MR. SINKIN: No objection.

1 MR. PIRFO: The Staff has no objection.

2 JUDGE BECHHOEFER: Applicants Exhibit 85 will be
3 admitted into evidence.

4 (Applicants' Exhibit 85 received
5 in evidence.)

6 BOARD EXAMINATION

7 By Judge Bechhoefer:

8 Q Turning to the February 20 meeting, I understand
9 that as a part of your presentation, you had slides to
10 assist you?

11 A Yeah, I would likely have a view graph.

12 Q Would -- could someone show you Applicants'
13 Exhibit 83.

14 MR. SINKIN: I've got it [hear/her/here].

15 Q (By Judge Bechhoefer) Is that -- was that an
16 example of something that you prepared in connection with
17 your presentation?

18 A Yes, this looks very familiar.

19 Q Would you have followed up on any of those
20 individual items with more details?

21 A I would think that these items would be reported
22 in a matter of say -- most of the time, we try to go over
23 these items in about ten, twelve, fifteen minutes at the
24 most.

25 It was our style with the Management Committee to

1 give them up front a quick report of the major activities
2 that were going on currently at that time on the project.

3 MR. AXELRAD: Mr. Chairman, it might be useful to
4 make sure that when you ask these kinds of questions, to
5 Mr. Barker, he knows whether you're talking about the first
6 day meeting of the Management Committee or whether he's
7 talking about the second day meeting of the Management
8 Committee with the chief executive officers, because I'm
9 not sure the answer would be the same for both days.

10 Q (By Judge Bechhoefer) Right. I had mentioned
11 February 20, but that is the second day.

12 A Yes, that's why I answered it that way, that
13 would be the full meeting on the second day.

14 Q Were those second day meetings somewhat more
15 formal than the first day committee meetings?

16 A Yes, they would generally be more formal, a
17 little bit more structured than the previous day.

18 Q Is there any significance to the placement of
19 Items 6 and 7 consecutively, the sequence?

20 A I can't recall whether this agenda was built with
21 any particular sequence in mind.

22 Q Would the sequence have will any relationship to
23 the connection of the two topics with each other?

24 A I can't recall whether they would in this
25 particular case, Mr. Bechhoefer; I can't recall.

1 Q Turning back to the February 19 meeting which is
2 in Applicants' Exhibit 80?

3 A Okay.

4 Q Turning to the -- on page 81037, which is I guess
5 the third page of the typewritten notes, at least?

6 A I have it.

7 Q With respect to Mr. Goldberg's remarks at the
8 bottom of the page, about whether the Board would believe
9 -- would or wouldn't believe the contractor, the utility,
10 or the third party reviewer, was that -- is the reference
11 to "people we've hired" one to Quadrex, or Nuclear Services
12 as the case may be?

13 A I can't recall these statements Mr. Bechhoefer,
14 at the meeting. I can only comment on what, or speculate
15 on what Mr. Goldberg -- what he meant when he said those
16 statements.

17 Q Well, I prefer you not to speculate. But do you
18 remember whether he might have been discussing potential
19 witnesses at the hearing?

20 A No, I don't recall that. I do know that we
21 wanted to do an independent review as we mentioned before
22 off project, to determine the status of engineering in
23 regard to questions that may arise at the hearing; I think
24 even above Mr. Goldberg may have referred to some
25 connotation that if questions arose, that we'd be in a good

1 position to answer the Board's questions if an independent
2 review would have been conducted.

3 Q Did Mr. Goldberg actually state that if an
4 adverse audit were to -- were to occur, were to be the
5 result, that it would be disclosed and explained to the
6 Licensing Board?

7 A Mr. Bechhoefer, I can't recall any statements to
8 that effect that Mr. Goldberg may have made.

9 Q Can you recall whether Mr. Oprea expressed any
10 disagreement or disinclination to provide the Board with
11 the results of an adverse audit, the results or an
12 explanation of an adverse audit?

13 A Disagreements with what or --

14 Q Well, with anything that Mr. Goldberg had stated.

15 A I don't recall any disagreements that Mr. Oprea
16 or Mr. Goldberg might have had on that subject.

17 Q Were there differing views expressed on the
18 subject, one by Mr. Goldberg, one by Mr. Oprea?

19 A I don't recall any disagreements. At that time,
20 there always had to be some questions in people's mind, "Is
21 this engineering review, you know, what are we going to be
22 doing." And I know there was some dialogue possibly along
23 those lines as, you know, "What are you going to look at
24 and how are you going to go about it it and so forth." But
25 those are more of a question than a disagreement. But I

1 don't know if that's what --.

2 Q Do these words, "Oprea didn't think would affect
3 May hearings," do those ring a bell with you, bring back
4 any memory of what that involved?

5 A No. I could speculate. Just sort of you know
6 being involved as project manager on a whole host of
7 things, you kind of get a feel for, you know, what's going
8 on.

9 Q Maybe that's not complete speculation.

10 A But the purpose of the review was to perform,
11 determine the status, you know, of engineering so we could
12 complete the project. That was the underlying theme.
13 Secondary benefits could arise out of conducting that
14 review and we would use that information as appropriate.

15 Q Turning to Page 4 of your November notes, which
16 are the Applicants' Exhibit 85.

17 Q Okay. What page is that again, Mr. Bechhoefer?

18 A Fourth page.

19 Q Fourth page. It's the meeting with Mr. Geurts on
20 November 10. You testified that the item numbered three,
21 related to a B&R design review or a plan for that. Am I
22 correct?

23 A Yes, that particular -- those notes, as best I
24 can recall, would have been referring to ongoing design
25 review that if Brown & Root was going to conduct such a

1 review, that we would like for them to report that you know
2 on the monthly meetings and also in the monthly report, the
3 status of that review.

4 Q Was this just a potential course of action or was
5 Brown & Root in fact performing such a review?

6 A As best I can recall, when Jim Geurts and I first
7 had those conversations about conducting a review, he had
8 indicated to me, you know, that Brown & Root wanted to do
9 this review and there were, over the next couple of weeks,
10 there was some discourse or dialogue on exactly, you know,
11 what that review would entail, who would do it, what would
12 be the scope of it, what would be the depth of it.

13 Around in parallel with that, we had
14 conversations, I had conversations with Mr. Goldberg and my
15 staff, we had presentations at briefings with Mr. Goldberg;
16 the Brown & Root design review activity, what actually took
17 place, I'd have to go back and refresh my memory from
18 progress reports as to what they really did do from that
19 time forward. But the decision was made to do an
20 independent outside review in order to get an independent
21 unbiased view of the status of engineering.

22 Q Well, would this note suggest here that at that
23 point in time, Brown & Root was trying to head off a third
24 party review by proposing an in-house review?

25 A I would say possibly. I don't recall. Again, we

1 were determining at that time, Mr. Goldberg and myself,
2 what would be the best way to conduct the review and what
3 type of review we wanted. It was a common practice of me
4 to review these particular matters with Geurts to inform
5 him what we expected of him and the Brown & Root
6 organization.

7 Likely, at that time, Mr. Geurts had identified
8 that, you know, we are doing certain things here, we had
9 just come out of the -- some of the activities associated
10 with the show cause order, and were beginning a restart
11 program and therefore review of engineering on a
12 comprehensive basis was in order, and that Brown & Root was
13 doing certain things internally. And perhaps with this
14 note Jim and I may have had some discussions to the effect
15 that "If you're doing this review, then they want to place
16 it in the monthly report."

17 Q Do you recall whether at the time of the December
18 4 meeting, the decision to go forward with the third party
19 review had actually been made?

20 A I don't have any independent recall that the
21 decision had been made at that time. But I believe it was.
22 And I believe that Dr. Sumpter was at that time searching
23 for the firm to assist him in that review.

24 Q Mr. Barker, I want you to ask six fairly general
25 questions. And from your standpoint or from the standpoint

1 of your own knowledge, I would like you to tell me whether
2 you fully agree with the following six statements or agree
3 in part or don't agree at all or fully support it.

4 First is: The purpose of the Quadrex review was
5 to ascertain the status of engineering at STP.

6 A I fully agree.

7 Q Second one is: The purpose of the Quadrex review
8 was to evaluate B&R's engineering activities as they
9 reflected B&R's ability to complete the design of STP in an
10 efficient and orderly way.

11 A I would fully agree.

12 Q The third one is: HL&P commissioned the Quadrex
13 review to obtain an objective assessment of the status of
14 B&R's nuclear engineering and design activities.

15 A I would fully agree.

16 Q Next one is: The third party assessment of
17 design activities was sought in order to judge what
18 improvements were necessary to complete the project
19 successfully as well as to provide useful information
20 regarding the status of the project for discussions with
21 HL&P management, the STP co-owners and regulatory
22 authorities.

23 A I would fully agree.

24 Q Next one is: The underlying purposes of the
25 Quadrex review were to assess whether B&R was in the main

1 stream of nuclear engineering practice, to evaluate B&R's
2 performance in areas in which there was reason to believe
3 that it might be experiencing difficulty, to assist in
4 benchmarking the status of the project and to identify
5 opportunities for improvement in B&R's engineering work?

6 A I would fully agree.

7 Q Final one is: The principal focus of the Quadrex
8 report was on the sequence, stage of completion and B&R
9 management of design activities and not on design QA?

10 A I would fully agree.

11 MR. BECHHOEFER: Thank you, that's all the
12 questions the Board has.

13 MR. AXELRAD: Mr. Chairman, could we take a ten
14 minute break so we could go over our notes?

15 JUDGE BECHHOEFER: I guess we'll take a ten
16 minute break, and we'll probably try to finish before
17 lunch. You may want to get Dr. Sumpter in the
18 neighborhood, at least.

19 We are off the record.

20 (Discussion off the record.)

21 JUDGE BECHHOEFER: Back on the record.

22 MR. AXELRAD: Yes, Mr. Chairman, we have no
23 redirect for Mr. Barker.

24 MR. BECHHOEFER: Mr. Sinkin.

25 MR. SINKIN: No, I have no questions, Mr.

1 Chairman.

2 MR. PIRFO: The Staff has no questions.

3 JUDGE BECHHOEFER: Mr. Barker, you are excused.

4 THE WITNESS: Thank you, Mr. Bechhoefer, for the
5 opportunity to appear.

6 MR. AXELRAD: Applicants now call to the witness
7 stand, Dr. Sumpter who has previously been sworn.

8 JAMES R. SUMPTER

9 called as a witness on behalf of Applicants, having been
10 previously duly cautioned and sworn, testified upon his
11 oath as follows:

12 DIRECT EXAMINATION

13 By Mr. Axelrad:

14 Q Dr. Sumpter, will you please state your full name
15 for the record?

16 A James R. Sumpter.

17 Q Dr. Sumpter, did you have a telephone
18 conversation with Mr. Loren Stanley of the Quadrex
19 Corporation on or about January 2, 1981?

20 A Yes, I did.

21 Q What was the purpose of that telephone call?

22 A The purpose of that conversation was to inform
23 Mr. Stanley that Houston Lighting & Power Company was
24 interested in having an independent review of Brown & Root,
25 engineering, and wanted to find out if Quadrex had the

1 qualified personnel available to perform that review and if
2 so, to please send HL&P a proposal.

3 MR. AXELRAD: Mr. Chairman, I would like to have
4 marked for identification a one page sheet which has at the
5 upper left hand corner the numbers 918 455-9351, and in the
6 right hand corner 18 and a circle. I would like to have
7 that marked as Applicants' Exhibit No. 86.

8 (Applicants' Exhibit No. 86 marked
9 for identification.)

10 Q (By Mr. Axelrad) Dr. Sumpter, I have provided you
11 with a copy of this one page sheet which has been marked
12 for identification as Applicants Exhibit No. 86. Do you
13 recognize this document?

14 A Yes, I do.

15 Q Could you explain for us what this document is?

16 A I believe in February of 1982, I asked Loren
17 Stanley from Quadrex to send me a copy of all the material
18 he had in his files concerning the Brown & Root engineering
19 review.

20 This sheet was one of those because he numbered
21 them in the upper right hand corner and he sent me a letter
22 enclosing all those documents and this particular sheet was
23 the record of -- his record of that phone call I made to
24 him on January 2nd. It also has some notes at the bottom,
25 that were obviously made after January 2nd.

1 Q On the left hand side of the page near the
2 middle, I direct your attention to the words "May '81
3 hearing NRC." Do you see those words?

4 A Yes.

5 Q Do you recall mentioning the May 1981 NRC
6 hearings during your first telephone with Mr. Stanley?

7 A Specifically, no, I do not.

8 Q Can you explain why Mr. Stanley might have made
9 such a notation as a result of your conversation?

10 A There's a couple of possibilities. No. 1, I had
11 not talked to Loren Stanley for a couple of years, since
12 the last work he did when he was with Nuclear Services
13 Corporation for HL&P. So one possibility is that I
14 probably brought him up to date on the project as far as
15 giving him an idea of where we were in construction, the
16 fact we had a show cause order issued against us and part
17 of the construction was shut down and I probably mentioned
18 that we had hearings scheduled in May of 1981 that dealt
19 with that show cause order.

20 The second possibility is that I indicated to him
21 I wanted the study done in several weeks and I may have
22 indicated that that would be before the hearings would
23 start.

24 Q Either in this first conversation or at any other
25 time, did you ever tell Mr. Stanley that preparation for

1 the NRC hearings was one of the reasons for conducting the
2 review of Brown & Root engineering?

3 A Absolutely not. That was not the purpose of this
4 review.

5 Q If that was not -- if preparation for hearing was
6 not one of the reasons for conducting the review, why do
7 you believe it's possible that you might have told Mr.
8 Stanley that HL&P expected the review to be completed
9 before the NRC hearings?

10 A The the only possibility that I can think is that
11 in case any questions arose at the hearing that dealt with
12 engineering, this report might provide some information and
13 be useful in answering those questions, is the only
14 possibility I can think.

15 Q Did you and Mr. Goldberg discuss the possibility
16 that the review might provide information that would be
17 useful if engineering questions came up at the hearing?

18 A When Mr. Goldberg and I had our meeting in early
19 December where he indicated to me that he wanted an
20 independent third party review done of Brown & Root
21 engineering, and he and I discussed the topics to be looked
22 at in that review and possible consultants and that sort of
23 thing, he did indicate that since he was the new man on the
24 block, that there was a possibility that the Board may ask
25 him about since he's been with HL&P six months or so, what

1 his views were of engineering and that this report might
2 provide him some information that would be useful in
3 addressing those issues if they were ever asked.

4 Q On this document that's been marked for
5 identification as Applicants' Exhibit 85, it appears that
6 they reproduced copy had a card that had the word T.J.
7 Pashos and some telephone numbers stapled on top of it. Do
8 you know what is written on that page below that stapled
9 document, stapled card?

10 A No, I do not. The copy Mr. Stanley sent me was a
11 Xerox copy that had this card already Xeroxed on it.

12 MR. AXELRAD: We have no further questions of Dr.
13 Sumpter.

14 JUDGE BECHHOEFER: Mr. Sinkin.

15 CROSS EXAMINATION

16 By Mr. Sinkin:

17 Q Dr. Sumpter, you stated that you contacted Mr.
18 Stanley in February of 1982 and asked him to send
19 everything he had in his files regarding the study of Brown
20 & Root. Is that correct?

21 A Yes, it is.

22 Q Can you tell me why you contacted Mr. Stanley and
23 made that request?

24 A I can't recall directly. I'm not sure if it was
25 in connection with the Brown & Root lawsuit or what the

1 reason was, whether we were just trying to get my files
2 totally complete or not. I can't recall.

3 Q Well, at about that same time, were you being
4 questioned by NRC investigators regarding the Quadrex
5 study?

6 A I was questioned by them. I can't recall the
7 time exactly when they talked to me.

8 Q Do you know a precise date in February of '82
9 that you made that call?

10 A No. I looked and -- I wanted to make sure I
11 didn't have the original of this with the card and the
12 Xerox, I looked at the letter that Mr. Stanley sent me and
13 I believe the date on the letter was February 5th, '82.
14 I'm not sure when I came him a call.

15 Q The notation on the bottom of Applicants' Exhibit
16 86, a cloud as it were, is that Mr. Stanley's writing?

17 A It could be, I can't see the signature or the
18 note underneath that '81 date. Most likely it's his
19 writing.

20 Q And was that on the document when you received it
21 in February of '82?

22 A Yes, it was.

23 Q And the numbering system used in the upper right
24 hand corner would I-A be the first document
25 chronologically?

1 A In the letter Mr. Stanley sent me, all the
2 documents he sent me, he put a number at the top. I can't
3 recall whether it was done chronologically or not.

4 Q The notation that was called to your attention,
5 "May '81 hearing NRC," appears right below another notation
6 "fairly heavy people." Do you have any recollection of
7 what fairly heavy people would have referred to?

8 A Only thing would come to mind would be that
9 Quadrex would need to supply us with some people who had
10 considerable amount of expertise in these areas.

11 Q And you expressed two possibilities to explain
12 the notation regarding the May '81 hearings. Do you have
13 any basis other than speculation for those two
14 possibilities?

15 A Can you clarify that question?

16 Q Okay. You were asked to explain the notation to
17 the best of your recollection. And you've said that there
18 were a couple of possibilities. One was that you hadn't
19 talked to Mr. Stanley for a couple of years and you could
20 have been bringing up him to date and the other one was
21 that you wanted the study done in a couple of weeks because
22 you wanted to have it finished before the hearing started.

23 And my question is whether either of those
24 possibilities have any basis other than your current
25 speculation that that's why that notation appears?

1 A Well, it's my best judgment those are the two
2 most likely possibilities. I don't have any documentation,
3 if you will, to back those up. It's just my best judgment.

4 Q Nothing that refreshed your recollection
5 regarding either of throws possibilities.

6 A No.

7 Q You've stated that in your discussions with Mr.
8 Goldberg that Mr. Goldberg indicated that since he was the
9 new man on the block, the Board might want his views on
10 engineering and that the the Quadrex study would be useful,
11 could be useful if that happened. Did you have any further
12 occasion to discuss with Mr. Goldberg possible linkages
13 between the Quadrex study and the Phase I hearing?

14 A No. We never ever after that talked about the
15 hearing, preparation of testimony, issues in the hearing or
16 anything like that relative to Quadrex.

17 All the rest of our conversations dealing with
18 Quadrex dealt with what they were going to look at, the
19 manner in which they were going to go about it, the
20 mechanics of the review. And on what do you base your
21 testimony that the telephone conversation recorded in these
22 notes took place on January 2nd, 1981, other than Mr.
23 Stanley's notation, if anything?

24 A I believe when the NRR investigators came to HL&P
25 and interviewed each one of us, I had put together a

1 scenario of the various times, and this date, I believe, is
2 mentioned in the report that they wrote up.

3 Q Can you by any chance tell me what the marginal
4 notation off on the left side says?

5 A A lot of it's scratched out, looks like there's
6 an E-s-s-w-e-i-n, Esswein. Gene Esswein was one of the
7 reviewers so that may be the names of people who were put
8 down.

9 MR. SINKIN: That's all I have, Mr. Chairman.

10 MR. PIRFO: Mr. Thank you, Mr. Chairman.

11 CROSS EXAMINATION

12 By Mr. Pirfo:

13 Q Dr. Sumpter, your current title is
14 manager-litigation technical support.

15 A Yes.

16 Q You entered that position on -- in December 1984?

17 A That's correct.

18 Q With an eye towards the Brown & Root litigation?

19 A Yes.

20 Q Did this -- was this a new position where you
21 took on new duties or was this a position that was a change
22 in title that better described duties you had previously?

23 A No, it was a new position with new duties.

24 Q Okay. So the title manager-litigation technical
25 support was not a function you were performing in late

1 1980.

2 A No. In late 1980 I was manager of nuclear
3 services department, which had responsibilities for nuclear
4 engineering, nuclear licensing, health physics.

5 Q But the litigation technical support, you would
6 not view "litigation technical support" quote unquote as
7 part of that function that you were performing in 1980?

8 A No.

9 Now we did, as the -- let me clarify that one
10 second. As the attorneys proceeded with developing with
11 lawsuit against Brown & Root, various individuals within
12 the company supplied them information and assistance in
13 addition to their regular duties and that was the only
14 connection I had with that litigation in 1980 and '81, if
15 there was any information supplied to them at that time
16 frame. There may not be very much then.

17 Q But a regularly performed duty, something you
18 were expected to do in late 1980 was not to provide
19 technical support for litigation?

20 A No.

21 Q So the fact that you were placed in charge of the
22 independent third party review had no connection with
23 litigation in your mind?

24 A No.

25 Q Be that Brown & Root litigation or Atomic Safety

1 and Licensing Board litigation?

2 A No.

3 MR. PIRFO: That's all I have. Thank you, Dr.
4 Sumpter.

5 JUDGE BECHHOEFER: I have a couple.

6 BOARD EXAMINATION

7 By Judge Bechhoefer:

8 Q Dr. Sumpter, was the January 2, 1981 telephone
9 call your first call to Quadrex about the project or
10 Quadrex or Nuclear Services, whatever their name was, was
11 that your first communication with them?

12 A Yes, that was my first communication with Quadrex
13 about doing this review.

14 Q Do you know whether anyone else in the company
15 had contacted Quadrex earlier?

16 A I'm not aware of anyone having done so.

17 JUDGE BECHHOEFER: Would someone show Dr. Sumpter
18 Applicants' Exhibit 79 which is the December 4 meeting, the
19 notes of the December 4 meeting.

20 Q (By Judge Bechhoefer) Dr. Sumpter, will you turn
21 to the page which has the number 2052 on it, the second
22 page of that document? These are notes of Management
23 Committee meetings on December 4, 1980. And I recognize
24 you were not present. But would you have any idea what
25 the -- under the time 3:10, there's a little note that says

1 "identifying outside engineers now." Would you have any
2 idea what that refers to? This December 4, 1980.

3 A When Mr. Goldberg and I met in early December
4 when he first broached this subject with me, one of the
5 topics we did discuss was who could do this review. And we
6 talked about criteria as far as whether another architect
7 engineer would review another architect engineer, whether a
8 consultant that had never done work on South Texas before,
9 those types of things. So those discussions were underway
10 in early December, as far as who would do this review.

11 Q These were in-house discussions?

12 A Yes, within HL&P.

13 Q Had not gone outside to talk to any of the
14 contractors?

15 A No. This card with T.J. Pashos, if I may explain
16 why I'm so definite about that, Mr. Pashos was a senior
17 vice-president with Quadrex who was known as NSC back in
18 '77, '78 and '79, when he did some work for us earlier as
19 their project manager.

20 My initial call to Quadrex was to Mr. Pashos
21 because he was my contact, and he had retired from the
22 company. Loren Stanley worked directly for Mr. Pashos in
23 that earlier work for HL&P. So when Mr. Pashos was no
24 longer there and retired, I then called Mr. Stanley and
25 this little handwritten note right above the T.J. Pashos

1 where it says "T.J. separate HL&P funding," Mr. Stanley
2 asked me if I wanted to bring Mr. Pashos on this effort and
3 he said if I did, he would have to be funded separately
4 because he didn't work for Quadrex. I'd have to have a
5 separate purchase order with him in addition to one with
6 Quadrex.

7 And so those were my two two main contacts at
8 Quadrex and that's why they didn't say that anybody was
9 calling them. I don't know who they would have called.

10 Q Dr. Sumpter, my last question is one you don't
11 even have to answer. But does the reference to "fairly
12 heavy people," does that refer to Quadrex or HL&P or this
13 Board? As I say, you don't have to answer that.

14 JUDGE LAMB: I'm not that overweight.

15 THE WITNESS: The HL&P people are fairly slim.
16 So it would have to be Quadrex.

17 MR. BECHHOEFER: That's all the questions we
18 have. Any follow-up?

19 MR. AXELRAD: We don't have any redirect, Judge
20 Bechhoefer.

21 MR. SINKIN: Just a short follow up.

22 RECROSS EXAMINATION

23 By Mr. Sinkin:

24 Q Did you indicate to Mr. Stanley that you did want
25 Mr. Pashos in on the study?

1 A No, I told him I did not want Mr. Pashos in. He
2 was more of a project manager type of individual at this
3 stage in his career and I indicated to him we needed some
4 detailed technical experts.

5 Q And did Mr. Pashos actively participate in the
6 study

7 A No, he did not. As far as I'm aware.

8 Q And that card is not your card with Mr. Pashos'
9 number; is that correct?

10 A No, it's not my card. The copy that Loren
11 Stanley sent me had this card Xeroxed on top of it.

12 MR. SINKIN: That's all I have, Mr. Chairman.

13 JUDGE BECHHOEFER: Staff.

14 MR. PIRFO: Staff has no questions.

15 JUDGE BECHHOEFER: Anything further?

16 MR. AXELRAD: Nothing further.

17 JUDGE BECHHOEFER: Dr. Sumpter, you're excused.

18 Have the parties discussed what will be done
19 about proposed findings at all?

20 MR. AXELRAD: Subject to the Board's approval, we
21 are making arrangements so that Mr. Sinkin will obtain a
22 copy of today's transcript on Monday in Austin, and all
23 three parties have agreed to simultaneous filings of
24 proposed findings next Friday. That will be, I assume,
25 just putting it in the mail on Friday.

1 MR. BECHHOEFER: Right. There's no need for
2 expedited delivery, particularly.

3 MR. AXELRAD: And one additional item we've
4 agreed to is I mentioned that the opening of the hearing,
5 we will attempt to get a affidavit from Mr. Stanley with
6 respect to this one page document; we will try to do it as
7 expeditiously as we can. That will not delay the filing of
8 proposed findings. If anyone feels compelled to file any
9 supplemental findings after the affidavit is filed, they
10 will be free to do so. I assume within, let's say, ten
11 days after we provide the affidavit.

12 JUDGE BECHHOEFER: I would suggest to parties
13 that if they are changing or modifying in any way any of
14 their earlier findings, they should at least give a
15 reference to that, that would be helpful, I think.

16 MR. PIRFO: I presume we're the only party that
17 will fit in that niche.

18 JUDGE BECHHOEFER: I'm just saying anybody who's
19 changing any of their earlier findings, we would appreciate
20 being told .

21 MR. SINKIN: We have agreed that Mr. Stanley will
22 file an affidavit. Based on Dr. Sumpter's testimony I'd
23 like to bring up a possibility of what one thing that
24 should be in that affidavit. The notation "May '81 hearing
25 NRC" appears right below the words "fairly heavy people."

1 I would like Mr. Stanley to answer the specific question
2 whether Dr. Sumpter said the people performing the study
3 should be fairly heavy people because they might be called
4 to testify in the May '81 hearing .

5 MR. AXELRAD: We will include that question in
6 the affidavit.

7 MR. SINKIN: Thank you.

8 JUDGE BECHHOEFER: Okay. Is there anything
9 further before we again close the record for Phase II? The
10 record would of course include the affidavit that we've
11 been discussing. Anything further? The record is hereby
12 closed again for Phase II. Anything further before we
13 adjourn?

14 Oh, the Board would like to mention that during
15 the Phase III hearings at some point, we may wish a further
16 site tour. We have not definitely decided but we may, we
17 may want that. So just putting the parties on notice.
18 Everybody can go along, I guess. The hearing is now
19 adjourned.

20 (Hearing adjourned at 1:20 p.m.)

21
22
23
24
25

CERTIFICATE OF OFFICIAL REPORTER

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

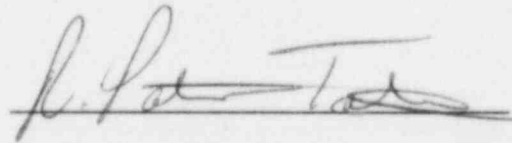
NAME OF PROCEEDING: HOUSTON LIGHTING & POWER COMPANY, et al.
(South Texas Project, Units 1*and 2)

DOCKET NO.: STN 50-498 OL; STN 50-499 OL

PLACE: HOUSTON, TEXAS

DATE: FRIDAY, DECEMBER 6, 1985

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



R. Patrick Tate
Official Reporter
Tate Reporting Service