

ORIGINAL

UNITED STATES
NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF:

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

HOUSTON LIGHTING AND POWER COMPANY,
et al.

(SOUTH TEXAS PROJECT, Units 1 and 2)

EVIDENTIARY HEARING

LOCATION: HOUSTON, TEXAS

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DATE: TUESDAY, AUGUST 6, 1985

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

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In the Matter of: : DOCKET NO.
HOUSTON LIGHTING AND POWER : STN-50-498-OL
COMPANY, ET AL., : STN-50-499-OL
(South Texas Project Units 1 & 2 :

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University of Houston
Teaching Unit II, #215
Houston, Texas

Tuesday, 6 August 1985

The hearing in the above-entitled matter was
convened, pursuant to adjournment, at 9:05 a.m.,

BEFORE:

JUDGE CHARLES BECHHOEFER, Chairman,
Atomic Safety and Licensing Board.
JUDGE JAMES C. LAMB, Member,
Atomic Safety and Licensing Board.

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 ALVIN GUTTERMAN, Esq.,
8 DONALD J. SILVERMAN, Esq.,
9 STEVEN P. FRANTZ, Esq.,
10 Newman & Holtzinger,
11 Washington, D.C.
12

13 On behalf of the Nuclear Regulatory Commission Staff:

14 EDWIN J. REIS, Esq.,
15 ORESTE RUSS PIRFO, Esq.,
16 Office of the Executive Legal Director
17

18 On behalf of the Intervenor:

19 LANNY ALAN SINKIN,
20 3022 Porter St. N.W., #304
21 Washington, D.C. 20008
22 Representative for Citizens Concerned About
23 Nuclear Power.
24
25

1 TUESDAY, AUGUST 6, 1985

2 C O N T E N T S

3	4 WITNESSES:	DIRECT	CROSS	REDIRECT	RECROSS	BOARD
5	RICHARD A. FRAZAR	14411	14413	14461	-	14485
6		-	-	14507	-	14500
7						
8	MARK R. WISENBURG	14512	14516	14550	14572	14574
9		-	14549	-	-	-
10						
11	CLOIN ROBERTSON	14583	-	-	-	-

12	13	14 EXHIBITS:	FOR ID.	IN EVD
15	CCANP Exhibit 123		14423	14429
16	CCANP Exhibit 124		14430	
17	CCANP Exhibit 125		14435	14444
18	CCANP Exhibit 72			14450
19	CCANP Exhibit 126		14450	14453
20	Applicants' Exhibit 66		14516	14516
21	Applicants' Exhibit 66-A		14573	14574
22	CCANP Exhibit 127		14591	14597

1 PROCEEDINGS

2 JUDGE BECHHOEFER: Good morning, ladies and
3 gentlemen.4 Are there any preliminary matters this
5 morning?

6 MR. PIRFO: No, sir.

7 MR. AXELRAD: No, sir.

8 JUDGE BECHHOEFER: Mr. Axelrad or Mr. Frantz,
9 as the case may be?10 MR. AXELRAD: Yes. Applicants now call to the
11 stand Mr. Richard A. Frazar who has previously been
12 sworn.13
14 Whereupon,15 RICHARD A. FRAZAR,
16 having been previously duly sworn, testified upon his
17 oath as follows:18
19 DIRECT EXAMINATION

20 BY MR. AXELRAD:

21 Q Mr. Frazar, do you have before you a document
22 entitled Testimony on Behalf of Houston Lighting & Power
23 Company, et al, of Richard A. Frazar, consisting of
24 eight numbered pages?

25 A Yes, I do.

1 Q Is the testimony contained in that document
2 true and correct to the best of your knowledge and
3 belief?

4 A Yes, it is.

5 Q Do you adopt that testimony as your testimony
6 in this proceeding?

7 A I do.

8 MR. AXELRAD: Mr. Chairman, Applicants move
9 that the document entitled Testimony on Behalf of
10 Houston Lighting & Power Company, et al, of Richard A.
11 Frazar be admitted into evidence in this proceeding and
12 incorporated into the transcript as if read.

13 MR. SINKIN: No objection.

14 MR. PIRFO: The Staff has no objection.

15 JUDGE BECHHOEFER: Mr. Frazar's testimony will
16 be admitted into evidence and bound into the record as
17 if read.

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1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

4 In the Matter of)
5 HOUSTON LIGHTING & POWER) Docket Nos. STN 50-498 OL
6 COMPANY, ET AL.) STN 50-499 OL
7 (South Texas Project, Units 1)
and 2))

8
9 TESTIMONY ON BEHALF OF HOUSTON LIGHTING & POWER COMPANY,
10 ET AL.,
11 OF RICHARD A. FRAZAR

12 Q.1 Please state your name and occupation.

13 A.1 I am Richard A. Frazar, Manager of the Engineering
14 Assurance Department of Houston Lighting & Power Company
15 (HL&P).

16
17 Q.2 Have you previously testified in this proceeding?

18 A.2 Yes, I testified in May and June 1981 and in February
19 1982.

20
21 Q.3 Please describe your educational and professional
22 qualifications.

23 A.3 My educational and professional qualifications are
24 generally described in my earlier testimony in Phase I of
25 this proceeding.

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1 Q.4 Has your position at HL&P changed since you last
2 testified?

3 A.4 No.

4
5 Q.5 What is the purpose of your testimony?

6 A.5 In response to the request of the Atomic Safety and
7 Licensing Board (Licensing Board or Board) at page 19 of
8 its Memorandum and Order of February 26, 1985, the
9 purposes of my testimony are (1) to describe my knowledge
10 when I testified in 1981 of the report prepared by
11 Quadrex Corporation (Quadrex) entitled "Design Review of
12 Brown & Root Engineering Work for the South Texas
13 Project" (Quadrex Report), as well as my view on the
14 adequacy of Brown & Root (B&R) services at that time, and
15 (2) to show that I was truthful and candid in my
16 testimony before the Board at that time and that there
17 was no occasion for me to mention either the Quadrex
18 Report or the pendency of a far-reaching review of B&R
19 design engineering services.

20
21 Q.6 Did you have any involvement in the initiation or perfor-
22 mance of the review of B&R engineering by Quadrex in
23 early 1981 or in HL&P's review of the Quadrex Report for
24 reportability on May 8, 1981?

25 A.6 No. During that period and until June 22, 1981, I was
26 stationed at the STP site performing the functions of
27 Project QA Manager. I was aware that the Quadrex review

28

1 was being conducted because it was referred to in
2 occasional discussions with Mr. Goldberg or other HL&P
3 personnel or at meetings of HL&P staff. However, the
4 Quadrex review of B&R engineering was being performed as
5 an independent assessment for HL&P executive management
6 and was not part of any of the required programmatic
7 reviews or QA functions, and there was no need for any
8 involvement by the HL&P QA Department. I did not attend
9 any briefings by Quadrex concerning the Report.

10
11 Q.7 Have you reviewed the Quadrex Report?

12 A.7 No. I probably received a copy at the STP site after it
13 was provided to HL&P on May 7, 1981, since my successor
14 as HL&P Project QA Manager found one in the site office.
15 However, I did not review it at that time or later.
16 Until I left the site in June 1981, my attention was
17 principally focused on the corrective actions being taken
18 as a result of the problems identified in I&E Inspection
19 Report No. 79-19 and the related Notice of Violation and
20 Show Cause Order.

21
22 Q.8 Were you involved when personnel of NRC Region IV asked
23 to see the Quadrex Report in August 1981?

24 A.8 Yes. I had left the STP site after June 22, 1981, and
25 was stationed at HL&P's Baybrook offices near Houston. I
26 recall that Mr. Richard Herr and Mr. Shannon Phillips
27 asked to see a copy of the Quadrex Report. Since I did
28

1 not have a copy, I tried to reach Mr. Goldberg, who was
2 not available that day. My recollection is not precise
3 as to whom I reached, but I believe that I spoke to Mr.
4 Oprea who assured me that the Report should be made
5 available to the NRC. A copy of the Report was made
6 available to them.

7
8 Q.9 Was it your understanding that the Quadrex Report was to
9 be withheld from the NRC Staff?

10 A.9 No. I knew that copies of the Quadrex Report were
11 available within HL&P and B&R, and I was aware of no
12 restrictions on making it available to the NRC Staff.

13
14 Q.10 When you testified in 1981, what was your understanding
15 of the import of the Quadrex Report?

16 A.10 Since I had not received any briefings on the Report and
17 had not read it, I had no knowledge of the substance of
18 the Report. From conversations with HL&P staff, I knew
19 that the NRC had been notified of three potentially
20 reportable items under 10 CFR § 50.55(e), and there was
21 no indication that the Report reflected generally on
22 B&R's compliance with QA requirements.

23
24 Q.11 At that time, what was your opinion concerning B&R's
25 services at STP?

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1 A.11 I had worked very closely with B&R in the development and
2 implementation of the improved QA program that applied to
3 construction activities at the site. I had confidence
4 that B&R would implement that program properly and could
5 complete construction in accordance with applicable
6 requirements. I was less familiar with B&R's engineering
7 activities, but those activities had been audited by HL&P
8 QA and inspected by the NRC for many years and I believed
9 that applicable QA requirements were being generally
10 observed. Thus, I had no significant concerns regarding
11 B&R's performance of the engineering-related portions of
12 the QA program either generally or based on the Quadrex
13 Report.

14

15 Q.12 Between issuance of the Show Cause Order and your
16 testimony in 1981, did you have any discussions with Mr.
17 Oprea or Mr. Goldberg regarding removal of B&R or seeking
18 alternatives to B&R?

19 A.12 No.

20

21 Q.13 Have you reviewed your 1981 testimony in this proceeding
22 in preparation for this hearing?

23 A.13 Yes. To prepare myself to testify today, I have reviewed
24 portions of my testimony that mentioned B&R engineering
25 services.

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1 Q.14 Do you now believe that you should have mentioned either
2 the Quadrex Report or any concerns regarding B&R's
3 engineering services in response to questions at the
4 portions of your testimony cited in the Board's
5 Memorandum and Order of February 26, 1985?

6 A.14 No. I had not read the Quadrex Report. Moreover, from
7 my understanding of the Quadrex Report it had no
8 relevance to the construction and construction QA matters
9 that were the focus of my testimony. Apart from the
10 matters already reported, as I mentioned previously, I
11 had no significant concerns regarding the engineering-
12 related portions of the B&R QA program, either generally
13 or based on the Quadrex Report.

14
15 Q.15 Specifically, please explain why you did not mention
16 those subjects at Tr. 3249-50?

17 A.15 At that point my testimony focused on the organizational
18 structure for the STP QA function and related
19 improvements made in response to 79-19 and the Show Cause
20 Order. This is apparent both from that testimony itself
21 and the line of questioning that it followed. (See,
22 e.g., Tr. 3248). The Quadrex Report and engineering QA
23 had no relationship to such matters. Moreover, even if I
24 had thought that the questions encompassed engineering
25 QA, I had no concerns to mention on those subjects.

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1 Q.16 Please explain why you did not mention those subjects at
2 Tr. 3527-28.

3 A.16 At Tr. 3527-28 I volunteered some information regarding
4 implementation of the QA-QC program in the course of
5 questioning addressed to Mr. Oprea which had begun on Tr.
6 3525 regarding a provision in the B&R contract entitled
7 "Implementation of Site Quality Assurance Program."
8 Although, at Tr. 3526, the questioning continued without
9 reference to the contract, in context it is apparent that
10 we were still addressing the site QA program. My own
11 answer, of course, focused on problems of implementation
12 identified in 79-19. Even if I had thought the question
13 was broader, however, I would not have mentioned the
14 Quadrex Report since, to my knowledge, it did not involve
15 significant problems in QA implementation beyond those
16 that had been reported.

17
18 Q.17 Please explain why you did not mention those subjects at
19 Tr. 5419-22.

20 A.17 I am not sure that I understand the Board's reference to
21 Tr. 5419-22. At that point, I was questioned concerning
22 my concerns in 1978 regarding B&R's QA performance and
23 how the improvements I perceived in early 1978 related to
24 the problems found in late 1979. There were no
25 engineering QA concerns at that time which were ignored
26 either in Applicants' Exhibits Nos. 44 and 45 (upon which
27
28

1 the questioning was based) or in my response to
2 questions. I do not see how the questioning could have
3 called for any mention of the Quadrex Report.
4

5 Q.18 In your review of other portions of your testimony, did
6 you find any answers that you now believe would have
7 called for you to mention the Quadrex Report or your
8 views at that time concerning B&R's engineering services?

9 A.18 No. In no instance do I believe that it would have been
10 reasonable to expect me to mention the Quadrex Report,
11 and I had no concerns regarding engineering QA which
12 would have been responsive to any question. I believe
13 that all of my testimony was truthful and candid and that
14 I responded properly to the questions that I was asked.
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1 MR. AXELRAD: Mr. Chairman, Applicants have no
2 further questions of Mr. Frazar and he's available for
3 cross-examination.

4
5 CROSS-EXAMINATION

6 BY MR. SINKIN:

7 Q Good morning, Mr. Frazar.

8 JUDGE BECHHOEFER: Mr. Sinkin?

9 MR. SINKIN: Yes.

10 JUDGE BECHHOEFER: Do you have any plan?

11 MR. SINKIN: Oh, I forgot the plan, Mr.
12 Chairman.

13 (Discussion off the record.)

14 Q (By Mr. Sinkin) Mr. Frazar, to your knowledge
15 was anyone from the quality assurance department of
16 Houston Lighting & Power present at the Quadrex
17 briefings held between March 1st, 1981, and May 8, 1981?

18 A Not to my knowledge.

19 Q To your knowledge, was anyone from the quality
20 assurance department involved at any time between
21 January 1, 1981, and May 8th, 1981, in the Quadrex
22 review?

23 A I do not believe that any -- or I do not -- to
24 my knowledge there were no people from the quality
25 assurance department directly involved with the conduct

1 of the Quadrex review. There were members of the staff
2 who were involved in some conversations regarding the
3 Quadrex review, but they had not participated in the
4 review.

5 Q How did you first learn the Quadrex review was
6 being conducted?

7 A Specifically, I don't recall. In general, it
8 was by word of mouth conversations.

9 Q Do you remember when that was?

10 A No, I don't.

11 Q Well, let's see if we can get it roughly. A
12 month prior to completion of the report or January? Can
13 you get it any closer?

14 A Sometime during the spring of 1981 I knew that
15 there was going to be a review done.

16 Q At any time between May the 8th, 1981, and mid
17 August 1981, was the Quadrex report provided to anyone
18 other than yourself in the Houston Lighting & Power
19 quality assurance department?

20 A I believe it was.

21 I need to comment on another part of your
22 question. Although apparently I -- as is stated in my
23 prefiled testimony that I apparently was distributed a
24 copy of that report sometime during that time frame, I
25 was not aware of that until sometime later when my

1 replacement found the copy of the report in my -- what
2 had previously been my office at the South Texas Project
3 site.

4 Q I see. So, it had been received in your
5 office, but you hadn't seen it?

6 A That's correct.

7 Q Okay. Well, then, other than that receipt in
8 your office, are you aware of anyone in the quality
9 assurance department who got a copy of the Quadrex
10 report between May the 8th and mid August 1981 when the
11 NRC investigators read the report?

12 A I'm not sure of the precise time, but I think
13 approximately contemporaneous with this initial issuance
14 other members, at least one other member of the quality
15 assurance department staff did receive a copy.

16 Q And who would that have been?

17 A Mr. Robert Ulrey, U L R E Y.

18 Q Do you know the circumstances under which he
19 received a copy?

20 A No, I do not.

21 Q Did you discuss the report with Mr. Ulrey at
22 any time after he received it?

23 A Do you mean all the way up until --

24 Q Well, let's say in the period from -- well, do
25 you know when he received it? You said about the time

1 it was issued?

2 A No, approximately contemporaneous with its
3 initial issuance.

4 Q Any time between that time and May 1981, did
5 you discuss the report with Mr. Ulrey?

6 A No, I did not.

7 Q And how are you aware that Mr. Ulrey received
8 a copy in roughly May of '81?

9 A I spoke with Mr. Ulrey recently regarding
10 whether or not he had received a copy of the report
11 contemporaneous with its issuance.

12 Q And what did he tell you in terms of what he
13 did with it when he received it?

14 A He said that he basically looked at the report
15 and looked at it from the standpoint of what use it
16 might be to him in guiding his management of the Houston
17 Lighting & Power quality assurance audit program. And
18 said that he found the document principally to be a
19 statement of various technical concerns which the
20 engineers would have to deal with and he found it to be
21 of a minor use to him in terms of influencing the audit
22 program of the quality assurance department from the
23 engineering -- standpoint of auditing the engineering
24 organization.

25 Q Do you know if he gave that report any

1 circulation beyond his office?

2 A No, I do not. I do know that he did make some
3 use of it in guiding his auditors to concentrate on one
4 area that he said seemed to indicate that he could do
5 some auditing and that had to do with the flow of
6 information between design disciplines.

7 I might add that you recall Mr. Ulrey at that
8 particular time reported directly to Mr. Oprea because
9 we had the department split in two distinct parts and
10 Mr. Ulrey managed the Houston portion of it which had
11 the auditing program.

12 Q When Mr. Herr and Mr. Phillips came in August
13 of 1981, did they come to the Baybrook office?

14 A Yes, they did.

15 Q And you were there when they arrived or how
16 did you make contact with them?

17 A I was there in that office when they came to
18 begin their inspection.

19 Q Were you the first one that they interviewed
20 when they got there?

21 A I was not interviewed during their
22 inspection. They simply contacted me as a management
23 representative at some point in their inspection to ask
24 for assistance in locating a copy of the Quadrex
25 report.

1 Q And is it your testimony that they
2 specifically asked you for the Quadrex report?

3 A Yes. Mr. Phillips and Mr. Herr had heard at
4 some point during their inspection of the existence of
5 the Quadrex report and apparently it had some relevance
6 to what they were pursuing and they asked for me to help
7 them in locating a copy.

8 Q You were actually assigned to the site but
9 happened to be at the Baybrook office? I'm a little
10 confused.

11 A No. As is in -- I believe it's in my
12 prefiled.

13 Q Until June of '81 you were assigned to the --

14 A Until June of '81, I was assigned to the
15 site. You may recall we had quite a number of days of
16 hearings in May and June of 1981 which kept me primarily
17 in the Houston area. And following the end of the
18 hearings in June, I had some time off and then returned
19 from that time off to the Baybrook office to take up new
20 job responsibilities at the Baybrook office. Mr. Geiger
21 had been hired basically in May and June of 1981 and
22 replaced me at the job site as the project quality
23 assurance manager.

24 Q So, Mr. Herr and Mr. Phillips had interviewed
25 some other people. They then came to you and

1 specifically requested the Quadrex report.

2 Did you at the time they requested the report
3 decide not to produce the report?

4 A I did not have a copy of the report to
5 produce. There's no decision making there, I simply
6 began the process of attempting to acquire what they had
7 requested.

8 Q And how did you go about attempting that?

9 A At the bottom of page 3 of my prefiled
10 testimony, question and answer 8 addresses that, I
11 believe.

12 To just basically expand on that, being at the
13 Baybrook office, that was also the location of Mr.
14 Goldberg's office. I went to his office, tried to talk
15 to him. He wasn't in the office on that particular day
16 and I found his secretary was not of any particular help
17 in locating a copy of the report at that time.

18 So, I called Mr. Oprea's office, I think, and
19 he and I talked about getting the report and he said,
20 "By all means, give it to them," and that left me
21 essentially in the same place. I still didn't have a
22 copy of the report and he was in the Electric Tower
23 downtown. I think I may have called someone else at
24 that point again to attempt to acquire a copy and I
25 believe, and my memory's a little bit fuzzy here, but I

1 believe that I subsequently was able to obtain a copy,
2 it may have been the next day, from someone, it could
3 have been from Mr. Goldberg, and then it was furnished
4 to the NRC.

5 Q Do you remember calling Mr. Barker about this?

6 A It's possible that I called Mr. Barker. We've
7 talked about the scenario involving who talked to whom
8 during that time concerning the obtaining of a copy for
9 the NRC and I just don't recall that vividly exactly
10 what all the events were that transpired leading up to
11 giving the copy to the NRC. I know that we were busily
12 trying to find a copy to give to them during that time.

13 JUDGE BECHHOEFER: Do you know the precise
14 date this all occurred on?

15 THE WITNESS: Judge Bechhoefer, I'm sorry, I
16 just don't know the precise date at this time. I know
17 it was late August of 1981. I don't have that date at
18 my fingertips.

19 Q (By Mr. Sinkin) When you gave Mr. Phillips
20 and Mr. Herr the Quadrex report, did you tell them it
21 was a confidential report?

22 A I don't think I told them that it was
23 confidential in those terms. I think what I expressed
24 to them is that here's a report, a copy of the report
25 for your review and you're welcome to review it here on

1 our premises and we would appreciate keeping the copy
2 here in the offices, but not that it was confidential.
3 I certainly didn't then and have never had any idea in
4 my mind that there was anything confidential about the
5 document.

6 Q Now, as you expressed it, you told them you
7 would appreciate keeping the copy in the office. Did
8 you tell them the copy was not available to leave the
9 site?

10 A I don't recall the specific language. The
11 message I tried to get across was that we wanted them to
12 review the document in the office and that they would
13 also -- I think there may have also been some discussion
14 that a copy would also be made available to them later
15 at the site should they desire to pursue it further.

16 And, incidentally, that expression of how to
17 handle the document was as a result of information that
18 had been given me or directions that had been given to
19 me regarding the handling of the document from whomever
20 I obtained the copy, not at my own initiative.

21 Q Well, did Mr. Oprea tell you when you talked
22 to him that they could look at a copy, but it was to
23 remain on the site?

24 A I don't recall who told me that.

25 Q You say in your testimony that you learned of

1 the three potentially reportable items from
2 conversations with HL&P staff. Can you tell me who on
3 the HL&P staff you talked to about the three reportable
4 items?

5 A No, sir, I can't. I don't recall who
6 specifically, I just -- that answer on page 4, question
7 10 or answer 10 may need some clarification.

8 I'm not referring there to any specific
9 conversations that I recall happening at any given point
10 in time, I'm just -- general conversation in the offices
11 that I came to know that there were three items that had
12 been determined to be reportable from the review of the
13 report.

14 Q Was it customary at that time for you to be
15 informed when notifications to the NRC under 50.55(e)
16 were made?

17 A No, it was not.

18 Q When you were told about the three findings or
19 the three potentially reportable items, excuse me, were
20 you told that one of them related to shielding
21 calculations?

22 A I don't recall specifically what level of
23 detail was provided to me at the time, whether it was a
24 general -- I think it was more of a general feeling on
25 my part of knowing the review of the report had resulted

1 in a decision that there were three items that were
2 reportable. And I don't recall when I knew any more
3 detail than that. It could have been then, it could
4 have been sometime later.

5 Q Had you been concerned at this time, May '81,
6 had you been concerned over the recent past about the
7 quality of Brown & Root's shielding and ALARA work for
8 sometime?

9 A I don't recall ever having had a concern about
10 their shielding and ALARA work.

11 Q Hadn't you received a quality assurance audit
12 very critical of Brown & Root's shielding and ALARA work
13 at the end of 1979?

14 A I don't recall having received such a report.

15 Q Mr. Frazar, I'm going to show you what I ask
16 be marked as CCANP 123.

17 (CCANP Exhibit No. 123 marked for
18 identification.)

19 Q (By Mr. Sinkin) This document, Mr. Frazar, is
20 an excerpt from HL&P audit BR-28 of Brown & Root's
21 engineering program. I'll give you a moment to review
22 it.

23 A Okay.

24 Q On page 2 of this document, Mr. Frazar, is a
25 memorandum from T. D. Stanley to Mr. Barker with copies

1 to you which states that the audit indicates a breakdown
2 of Brown & Root engineering in the areas of shielding
3 design calculations, ALARA review and supplier deviation
4 requests.

5 Do you recall this memorandum?

6 A No, I don't.

7 Q On the first page, or actually the first page
8 is a letter from you to Mr. Gamon at Brown & Root
9 stating that these particular areas are not adequately
10 controlled and a thorough review should be performed.

11 Do you remember telling Mr. Gamon that a
12 thorough review should be performed of the ALARA and
13 shielding design calculation areas?

14 A I don't recall this, no.

15 Q Do you know if prior to the Quadrex report,
16 Brown & Root undertook a review of their shielding and
17 ALARA analyses, the work that had been done in those
18 areas?

19 A The only information in this package that I
20 could rely on to answer that question is on the last
21 page, February 31st. That's an interesting date.

22 Q February 31st, yes, very interesting date.

23 A Anyway, it's a memorandum from Mr. Valley to
24 Mr. Stanley which says, in part, that "Brown & Root
25 engineers will review all design calculations received

1 from outside organizations and document their reviews."
2 And "Brown & Root has compiled a partial listing of the
3 design calculations requested. Those areas missing the
4 required design calculations are being evaluated and new
5 calculations will be performed and forwarded to HL&P."

6 I don't recall anything other than just what's
7 presented there in that document.

8 Q Do you recall if a 50.55(e) report was filed
9 around this time regarding a breakdown in Brown & Root's
10 ALARA and shielding calculations work?

11 A No, I do not.

12 MR. SINKIN: Mr. Chairman, I would move CCANP
13 123 into evidence.

14 MR. AXELRAD: Mr. Chairman, I would object to
15 that. The document that's been provided as CCANP -- or
16 that's been marked for identification as a CCANP exhibit
17 apparently consists of a number of documents. The first
18 is the apparent letter dated September 27th, 1979 to Mr.
19 Gamon from Mr. Frazar which apparently had some
20 enclosures, not all of which are included in what Mr.
21 Sinkin has provided.

22 Then there is apparently another document
23 dated December 26, 1979, and it isn't clear whether all
24 the enclosures to that document were provided. And then
25 there is a final document dated February 31, 1980 which

1 has not been identified by the witness.

2 We do not know whether these documents are
3 accurate or complete and it is not apparent to us how
4 documents dated back in 1979 in any event deal with the
5 issues before this proceeding right now dealing with the
6 failure of HL&P to provide information to this Board in
7 May 1981.

8 MR. SINKIN: Does the Staff have any view on
9 it?

10 MR. PIRFO: The Staff has no objection to the
11 document with the exception of the second page, Mr.
12 Frazar is not the author or direct recipient of it. He
13 was copied on it and he perceives to have a recollection
14 of that.

15 So, we would have no objection to the document
16 I guess subject to authentication by the Applicant, if
17 they move to strike it later.

18 MR. SINKIN: Yes, Mr. Chairman, the document
19 is an excerpt, as I said. However, this is the front
20 section of the audit, the major section which contains
21 the various correspondence back and forth regarding
22 responses to ADR's and when they're found unacceptable,
23 they're sent back.

24 The December 26, 1979 letter references an
25 attachment. The attachment is indeed there and is

1 documenting the ADR's that the Brown & Root response was
2 unsatisfactory on.

3 As far as the document being complete, there's
4 obviously the opportunity to the Applicants if they feel
5 the need to complete this document with more of what's
6 in it to do so. We felt that the section that was
7 excerpted adequately expressed the sentiments of the
8 audit regarding Brown & Root's work in this area.

9 And as to its relevancy, we find two areas of
10 relevancy. It's an audit about shielding calculations
11 and ALARA review that calls for a rereview of those
12 areas. That's precisely the point addressed in Mr.
13 Stanley's letter in March of 1981. We will demonstrate
14 through other documents that this review, in fact, never
15 took place that was requested in September of 1979.
16 And, furthermore, it goes to showing the attitude of Mr.
17 Frazar towards Brown & Root's work at the time he was
18 testifying in these hearings.

19 MR. PIRFO: Just for the record, the Staff
20 does not -- I mean, our objection -- our lack of
21 objection to the admission of the document is not
22 coextensive with the acceptance of Mr. Sinkin's argument
23 as to what it shows.

24 JUDGE BECHHOEFER: Mr. Frazar, will you turn
25 to the December 26, '79 document which is by count about

1 the seventh page. I don't think anyone asked you about
2 that one. Did you remember that one? Does that appear
3 to be your signature?

4 THE WITNESS: That appears to be my
5 signature. I would assume that that is a document which
6 I signed, authored and signed.

7 JUDGE BECHHOEFER: Does that help you
8 recollect anything about the audit in question?

9 THE WITNESS: No, sir. We had an audit
10 program that regularly audited the entire quality
11 assurance program on the South Texas Project,
12 engineering, construction, procurement, all of the
13 different activities that were going on on the project.
14 This document takes somewhat the form or the same format
15 as the correspondence that you would find in any of the
16 audit files if you went and looked over the many audits
17 that had been performed. So, it's not inconsistent in
18 that regard to what I would expect to see in the other
19 audit reports that are in the files as well.

20 JUDGE SHON: Would you say it was
21 substantially more serious or startling or shocking than
22 any of the others or was it anything you particularly
23 remember or were these standard like that?

24 THE WITNESS: Anytime we conducted an audit,
25 Judge Shon, that identified problem areas, we wrote

1 serious letters to our contractor and asked them to
2 respond to those audit reports and respond to those
3 findings with appropriate corrective action. And if we
4 found their response to be lacking in some regard, then
5 it was common that we would follow up with additional
6 correspondence and/or meetings and/or discussions with
7 them to ultimately resolve the matters of the audit.

8 JUDGE BECHHOEFER: The Board will admit this
9 document into evidence.

10 (CCANP Exhibit No. 123 admitted into
11 evidence.)

12 (No hiatus.)
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1 MR. PIRFO: I'm sorry, I didn't hear your --

2 JUDGE BECHHOEFER: We will admit it as an
3 exhibit. Now the Applicants, if they wish to produce
4 more of the audit, if they think more should be produced
5 are certainly welcome to fill that out. I can't tell you
6 what's in the rest of it. We will have no objection to
7 your doing that.

8 Q (By Mr. Sinkin) Mr. Frazar, I'm going to show
9 you what I ask be marked as CCANP 124.

10 (CCANP Exhibit No. 124
11 marked for identification.)

12 Q (By Mr. Sinkin) My question to you, Mr.
13 Frazar, will be whether this document represents the
14 guidance in place during the period of the Quadrex review
15 on how QA auditors should respond to potential 50.55(e)
16 reports?

17 MR. AXELRAD: Perhaps you would like to
18 identify the contents of this document.

19 MR. SINKIN: Yes. The first page is a
20 memorandum from Mr. Fite to Mr. Ulrey, the subject:
21 Auditors Handbook on Deficiency Reporting. The second
22 page is a title page called Auditors Handbook on
23 deficiency reporting, stating that it's prepared by the
24 licensing administration section, nuclear safety and
25 licensing, Houston Lighting & Power Company, October

1 22nd, 1980. There's then a table of contents.

2 JUDGE LAMB: That second page I don't have. Do
3 you have it?

4 MR. SINKIN: You don't have the title page of
5 the document? Oh, dear.

6 JUDGE LAMB: No, I don't have that.

7 MR. SINKIN: Okay.

8 Q (By Mr. Sinkin) The rest of the document has a
9 table of contents and then the excerpts of the sections
10 on quality assurance criteria which would be section one
11 in the table of contents, followed by the section on 10
12 CFR 50.55(e), conditions of construction permits, which
13 is section two.

14 Mr. AXELRAD: Are you saying that the entire
15 section one and section two are included but none of the
16 other sections are?

17 MR. SINKIN: To the best of my belief. If you
18 will remember, these sections traveled on the wrong
19 document to Houston originally and were taken off that
20 PEP 11 document. And to the best of my belief, what we
21 have are sections one and two of the auditors handbook.

22 Q (By Mr. Sinkin) There was a pending question,
23 Mr. Frazar, whether you recognize this.

24 A I'm sorry, I guess I missed the question.

25 Q It's quite all right. Whether you recognize

1 this as the front two sections of the Auditors Handbook
2 On Deficiency Reporting that were in place at the South
3 Texas Project during the time of the Quadrex report?

4 A I don't recognize this document. I don't
5 recall having actually read these pages before now.

6 Q Well, you would be the R.A. Frazar on the copy
7 of the front memo?

8 A That is my name, yes, that's correct.

9 I do recall that there was an auditors hand
10 book on deficiency reporting but I recall that being a
11 three-ring binder that had that title on its edge, and I
12 certainly don't recall this document.

13 Q The quality assurance auditors for Houston
14 Lighting & Power during this period had a responsibility
15 to identify potentially reportable findings under
16 50.55(e), did they not?

17 Mr. AXELRAD: Mr. Chairman, can we get
18 clarification about what "during this period" means.

19 MR. SINKIN: The period of the Quadrex review,
20 January '81 to May of '81. Let me rephrase the question.

21 Q (By Mr. Sinkin) In the period from January of
22 1981 to May of 1981, was part of the job of the HL&P
23 quality assurance auditors to be aware of the possibility
24 of potential 50.55(e) reports during their audits?

25 A Yes. Or at least aware of and sensitive to

1 conditions that might be potentially reportable or be
2 considered for evaluation for reportability.

3 Q And when they identified such conditions, what
4 steps did they take?

5 A I don't recall. The auditors did not work for
6 me at this particular time. In general, the procedure
7 that the company employed required anyone in the company
8 who became aware of conditions which would merit
9 evaluation for reportability to identify that information
10 to the incident review committee, to the project
11 organization that would then take that up as an item for
12 the incident review committee.

13 The procedure that was in place prescribed a
14 mechanism for transferring that information to the
15 project.

16 JUDGE BECHHOEFER: How did employees become
17 aware of this particular -- how did HL&P employees become
18 aware of their responsibility to make some reports?

19 THE WITNESS: There were training sessions
20 held, Judge Bechhoefer, licensing department periodically
21 assembled those people who were in the HL&P nuclear
22 related activities and gave them training on the content
23 of the regulation and also the content of the procedure
24 that governed the identification and evaluation and
25 subsequent reporting of matters of 55(e) and 10 CFR Part

1 21.

2 JUDGE BECHHOEFER: So they all knew they had to
3 go the incident review committee?

4 THE WITNESS: They all knew that there was that
5 mechanism in place of the incident review committee to
6 evaluate those matters, yes, sir.

7 JUDGE BECHHOEFER: Thank you.

8 Q (By Mr. Sinkin) The audit personnel came from
9 headquarters as opposed to being on site. Is that
10 correct?

11 A That's correct. Assuming you are talking about
12 the HL&P auditors.

13 Q The HL&P auditors, yes.

14 A Okay.

15 Q Can you remind me, Mr. Frazar, you moved from
16 corporate headquarters to the site in what month of 1980?

17 A Approximately June of 1980.

18 Q Are you aware of a review of Brown & Root's
19 shielding and ALARA work that was begun in March of 1981?

20 Mr. AXELRAD: What were those dates again, Mr.
21 Sinkin.

22 MR. SINKIN: March of 1981 it was begun.

23 A No, sir, I'm not.

24 Q (By Mr. Sinkin) Did you attend a meeting with
25 Brown & Root in March of 1981 to discuss shielding and

1 ALARA work?

2 A I don't recall attending such a meeting.

3 Q Do you recall an HL&P quality assurance audit
4 in October of 1980 that found that Brown & Root was not
5 adequately controlling their engineering effort?

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

7 Q Mr. Frazar I'll show you an excerpt from HL&P
8 audit BR-35, ask you to review it and ask that this be
9 marked as CCANP 125?

10 (CCANP Exhibit No. 125
11 marked for identification.)

12 MR. PIRFO: Mr. Chairman, at this point, I
13 don't have an objection but I have an observation that
14 we're taking an awful long time giving the witness
15 voluminous documents and he's spending time to read them.
16 I'm not sure if Mr. Sinkin is attempting to refresh his
17 recollection or the witness is trying to gain familiarity
18 with the document on the witness stand. It just seems
19 like it's taking an inordinate amount of time.

20 Q (By Mr. Sinkin) Well, Mr. Frazar, do you
21 recognize this as HL&P audit BR-35 conducted in September
22 of 1980 and reported in October of 1980?

23 A It would appear to be an excerpt from that
24 audit file. I don't recognize the document, haven't
25 looked at it recently nor do I recall having specifically

1 seen or paid detailed attention to it back in the past,
2 just don't recall.

3 Q Do you recall if, in October of 1980 or any
4 time shortly thereafter, a 50.55(e) report was filed on
5 an inability of Brown & Root to control and document
6 their current method of design and engineering?

7 A No, sir, I don't.

8 I might add that on reviewing the brief
9 descriptions of the ADR's contained in this document,
10 these types of audit findings consist primarily of
11 failure to follow detailed procedures in terms of
12 carrying out the activities. And I don't see anything on
13 its face in this document that would lead me
14 automatically to decide that a 55(e) item were necessary
15 for control of engineering.

16 It's not uncommon for an audit to find cases
17 where people don't follow procedures and to identify those
18 things for resolution. And I don't see anything here
19 that says that any of these findings have in any way
20 resulted in a deficiency in design or construction which
21 left undetected would affect the safe operation of the
22 plant which was one of the -- or the primary condition
23 for a 55(e) item to be filed.

24 Q Turning to the 6th page of this document, page
25 headed audit No. BR-35, topic discussion. Do you see

1 that page?

2 A I'm sorry, which page are you talking about?

3 Q By my count, it's the 6th page, it would be
4 following the list of personnel contacted, it's a page
5 numbered Audit No. BR-35.

6 Do you see that page?

7 A Yes.

8 Q Okay. The last sentence of the first
9 paragraph, the second, after the semicolon, it says the
10 period subsequent to the previous HL&P audit of Brown &
11 Root engineering, BR-28, September 1979, which I believe
12 is the document that was introduced as CCANP 123, by my
13 reading of that sentence, this audit in September of
14 1980, is the next audit after September of 1979.

15 My question to you is: Do you remember in
16 terms of preparing for your testimony in Phase I whether
17 you reviewed the quality assurance audits of HL&P done on
18 Brown & Root's engineering in the period '79 and '80
19 prior to testifying?

20 A You've confused me, Mr. Sinkin. You referred
21 to a sentence here on this page and then you led into
22 some question.

23 Q Okay, it was a wordy question. Let me just do
24 it more directly.

25 Prior to testifying in Phase I of this

1 proceeding, did you review the quality assurance audits
2 done by HL&P of Brown & Root's engineering program in
3 1979 and 1980?

4 A I know that I reviewed some audits. I'm sure I
5 did not review all of the audits, and I can't tell you
6 which of the audits that I did review. And when I say
7 the audits, I'm not just talking about specifically
8 audits of engineering, I reviewed some of the audits of
9 Brown & Root. And those -- and I can't even specifically
10 say if there were engineering related audits included in
11 the list that I did review.

12 The focus of the testimony that I delivered in
13 1981, in my mind, was principally related to the matters
14 that were in the show cause order and on which I had been
15 working for approximately a year and a quarter. And that
16 focus of the show cause order was not engineering, in my
17 mind, it was principally related to matters that were
18 being, or activities that were being conducted in the
19 construction phase of the project at the job site, where
20 I had been located for approximately a year at the time I
21 testified.

22 So I suspect that my principal -- in fact I
23 know that my principal preparation activity was to review
24 all of the things that I could review and that were
25 relevant to my testimony pertaining to the construction

1 QA program, and the efforts that we had undertaken to
2 remedy those things identified in the show cause order.

3 Q The show cause order did identify certain
4 engineers matters that were of concern too, did it not?

5 A The show cause order identified some matters
6 that involved engineering people providing information to
7 the people in the field, principally in the area of field
8 design changes, and field requests for engineering
9 information, and the principal focus there was on what
10 was being done to disposition field requests for
11 engineering action and also to disposition
12 non-conformance reports that were generated in the field,
13 and how that related to the process of changing the
14 design in order to accommodate those kinds of activities.

15 So again, the focus was principally on
16 engineering matters as it related to field construction,
17 not home office design engineering work.

18 Q Wasn't there a concern regarding whether the
19 home office was verifying the design changes being made
20 in the field?

21 A The field design change process involved
22 engineers in the field making decisions that were then to
23 be subsequently reviewed by engineers in the home office
24 in some cases. And the field -- the field design change
25 system was a focus of the show cause order as it related

1 to whether or not the field design changes were being
2 properly handled.

3 MR. SINKIN: Mr. Chairman, I would move CCANP
4 125 into evidence.

5 MR. PIRFO: The staff objects.

6 Mr. AXELRAD: Mr. Chairman, I would object on
7 the basis of lack of relevance and materiality. Mr.
8 Sinkin still has not established what it is that he is
9 trying to prove through this document as relevant and
10 material to the issues before this Board.

11 One of his questions implied that he was
12 interested in whether or not a 50.55(e) had been filed
13 with respect to some of the matters covered by this audit
14 report. The issue before this Board is not whether or
15 not a 50.55(e) should have been filed or was filed back
16 in 1980 with respect to engineering matters or what the
17 review of engineering matters was around that time, but
18 solely whether or not the Quadrex report contained
19 findings which should have been reported to this Board.

20 I see no other relevance and certainly no
21 material with respect to this document in any sense with
22 respect to Mr. Frazar's testimony or with respect to the
23 issues that are pending before this Board.

24 MR. PIRFO: The staff would join in that
25 objection, and as well add that doesn't seem that Mr.

1 Frazar is the witness to get this document in through
2 anyway, but since the Applicants don't raise that in
3 their objection, we won't certainly raise it.

4 The witnesses has testified he has no
5 recollection of the document; he's not the author nor the
6 chief recipient, he's been copied of on it. And I'm not
7 sure it addresses anything to his testimony. So beyond
8 the fact that it's of no relevance and lacks materiality,
9 it doesn't add anything to his testimony, and see no
10 reason for us to admit it.

11 MR. SINKIN: Mr. Chairman --

12 JUDGE BECHHOEFER: I think it's relevant on its
13 face. I think the witness has testified that he had no
14 significant concerns back in Phase I regarding the
15 engineering related portion of the B&R QA program, either
16 generally or later on the Quadrex report. I think this
17 document as well as the previous one may well undercut
18 that. So I think it's clearly relevant.

19 MR. SINKIN: And as far as the admissibility,
20 Mr. Chairman, the first page is copied to Mr. Frazar and
21 that's the whole audit; the second letter is copied to
22 Mr. Frazar, Mr. Frazar was obviously and integral part of
23 the quality assurance program at this time; I don't think
24 we have to go marching through HL&P calling witness after
25 witness just to get a single document in, that's never

1 been the requirement here. If we have a witness who's
2 copied, that's generally enough.

3 MR. PIRFO: Not when the witness says he has no
4 recollection whatsoever of the document. I mean, Lord,
5 if I were called to testify on every document I've ever
6 been copied on or anybody in this room, it would be a
7 nightmare.

8 MR. SINKIN: These are significant quality
9 assurance audits.

10 MR. PIRFO: And the witness testified he had no
11 recollection of them and that's the point.

12 JUDGE BECHHOEFER: Mr. Frazar, back on Phase I,
13 did you try to review -- prior to your testimony -- did
14 you try to review audits which might have a bearing on
15 the company's response to the show cause order?

16 Mr. AXELRAD: Mr. Chairman, you're talking
17 about prior to his testimony in Phase I?

18 JUDGE BECHHOEFER: Yes.

19 Mr. AXELRAD: Okay, I thought he answered that
20 question when Mr. Sinkin asked it.

21 THE WITNESS: I did review audit reports in
22 preparation for my testimony in Phase I of the hearings.
23 I reviewed primarily audit reports that would have been
24 connected with and identified in with the matters
25 contained in the show cause order.

1 JUDGE BECHHOEFER: Right. Now, did you regard
2 this one as not one of those? Or do you have, from
3 looking at it.

4 THE WITNESS: I don't see anything in here that
5 is particularly relevant to the show cause order.

6 JUDGE BECHHOEFER: Turn to the page that is
7 headed "Audit No. BR-35." If you read the second
8 paragraph on that page, does that perhaps refresh your
9 recollection at all?

10 THE WITNESS: It says what it says. What it
11 says, that this audit team looked at activities in the
12 home office that were responsive to the parts of the show
13 cause order that had to do with the field requests for
14 engineering action and design change control system
15 revisions. I still don't recall having reviewed this
16 audit report in preparation for my testimony in Phase I.

17 I might add, Judge Bechhoefer, that it was very
18 common for our auditors to, during this time frame, when
19 we were going through the show cause order, to do these
20 types of audits to verify that actions that carried off
21 the job site were, in fact, being implemented in the home
22 office.

23 At this particular time, I was working at the
24 job site and focusing on the matters that were down there
25 at the job site for which I had direct responsibility.

1 JUDGE BECHHOEFER: The Board will let this in
2 for what its worth. We're not sure what weight it is
3 entitled, but we will allow it to come in.

4 (CCANP Exhibit No. 125 admitted
5 into evidence.)

6 MR. SINKIN: Mr. Chairman, I don't understand
7 the Board's remarks as to weight. If it's the simple
8 fact that Mr. Frazar doesn't remember this audit, I don't
9 think there's any question that this is a HL&P audit of
10 Brown & Root and these are the findings that were made at
11 that time.

12 MR. PIRFO: Mr. Chairman, let me object to this
13 argument. This is something that should be enclosed in
14 his findings, every exhibit comes in subject to the
15 weight it's to be accorded, the mere fact the Board
16 articulated --

17 JUDGE BECHHOEFER: We articulated it because
18 this witness didn't remember it and his name is on it and
19 as far as we know, it's an authentic record.

20 But other than that, we're not sure what weight
21 it would have in evaluating the witnesses testimony.

22 Q (By Mr. Sinkin) Mr. Frazar, I gather you did
23 not review the Brown & Root engineering audits done by
24 HL&P prior to the time you testified in Phase I before
25 preparing your testimony for Phase II. Is that correct?

1 Did you follow that question?

2 A I think so. Phase II is what we're doing right
3 now, right?

4 Q Yes.

5 A That's correct.

6 Q So the statement on page 5 of your testimony in
7 answer 11, beginning, "I was less familiar," is simply a
8 statement of what you think you believed in 1981; you did
9 no independent effort to determine what your -- what
10 information was available to you in 1981?

11 Mr. AXELRAD: Mr. Chairman, I don't understand
12 that.

13 (No hiatus.)
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1 MR. AXELRAD: Mr. Chairman, I don't understand
2 that question. The sentence speaks for itself. Now,
3 what exactly is Mr. Sinkin asking with respect to that
4 sentence?

5 MR. SINKIN: Mr. Frazar is making a statement
6 as to what he believed at the time he testified.

7 Q (By Mr. Sinkin) My question is whether when
8 you're stating in your testimony what you believe at the
9 time -- what you believed at the time you testified in
10 Phase I, are you making that statement simply based on
11 your recollection today or did you do any independent
12 work to verify what was available to you in terms of
13 information in Phase I?

14 MR. PIRFO: That question makes absolutely --
15 I really don't understand it. He's saying did he go
16 back to determine in 1981 what he knew in '81? Did he
17 review -- is that the question?

18 MR. SINKIN: That's fine. That's basically
19 what I'm trying to get at. He's stating here what he
20 believed in 1981. What I'm trying to get at is whether
21 he went back and reviewed the information available to
22 him in 1981 as to whether -- which would have formed the
23 basis of that belief in '81 or whether he's simply
24 recalling today what he thinks he believed in 1981.

25 JUDGE BECHHOEFER: Is your question whether he

1 today or prior to this testimony went back or whether in
2 1981 he went back and -- I'm not sure of the dates that
3 you're driving at.

4 Q (By Mr. Sinkin) In preparing this testimony
5 for Phase II, did you go back and review any information
6 available to you prior to Phase I at all, any
7 information at all available to you prior to Phase I?

8 A Yes.

9 Q What did you review?

10 A I reviewed my prefiled testimony in Phase I.
11 I reviewed -- wait a minute. You limited it to prior to
12 Phase I, right?

13 Q Prior to the time you testified in Phase I.

14 A Okay. I primarily reviewed my prefiled
15 testimony from Phase I.

16 MR. SINKIN: Mr. Chairman, I'm about to move
17 into a new area. If we'd like to take a break now, this
18 would be a good time.

19 JUDGE BECHHOEFER: All right. Let's take a
20 fifteen-minute break.

21 (Brief recess taken.)

22 JUDGE BECHHOEFER: Back on the record.

23 Q (By Mr. Sinkin) Mr. Frazar, I would ask
24 Applicants' counsel to show you CCANP 72.

25 Do you have that document?

1 A Yes.

2 Q Is this the portion of the Brown & Root
3 quality assurance manual that covered design control
4 activities while the Quadrex study was being performed?

5 JUDGE BECHHOEFER: Point of inquiry, is Mr.
6 Frazar being shown the corrected version of 72?

7 MR. SINKIN: I trust he is.

8 Q (By Mr. Sinkin) Does the version you have up
9 in the upper right-hand corner state on the first page
10 revised 8-29-79?

11 A The first page says that.

12 Q Okay.

13 A The subsequent pages do not say that.

14 Q I understand.

15 A The subsequent pages have various revision
16 dates.

17 Q I understand. But the one you have does not
18 have an August date on the bottom of the page, does it?
19 I'm sorry, August of '81, it doesn't have that date on
20 the bottom of the page, does it?

21 A There are no dates on the bottom of the page.

22 Q Okay. Thank you.

23 JUDGE BECHHOEFER: We've had a couple of
24 versions talked about and I just wanted to make sure we
25 know which one you were being shown.

1 THE WITNESS: Okay.

2 A Mr. Sinkin, in order to be able to answer your
3 question about whether or not this one was the one that
4 was in effect during the conduct of the Quadrex review,
5 I would need to see a list of the revisions to this
6 document. I know when the Quadrex review was performed
7 it was certainly subsequent to August of '79. Just by
8 looking at this document, I can't tell if there might
9 have been revision between August of '79 and sometime in
10 1981 when the Quadrex review was conducted.

11 Q (By Mr. Sinkin) Mr. Frazar, if I were to tell
12 you that Applicants' counsel had represented to us that
13 this is the quality assurance manual that was in place
14 during the period that the Quadrex review was being
15 conducted, would you have any reason to doubt that based
16 on the document before you?

17 A I'd have no reason to doubt that.

18 MR. SINKIN: Mr. Chairman, as best we can tell
19 from the record, this document's status is that it is
20 still only marked for identification and the
21 substitution was a substitution marked for
22 identification. So, at this time I would like to move
23 CCANP 72 into evidence.

24 I should also note that the cover sheet that
25 Judge Shon noticed was missing is apparently on its way

1 but hasn't arrived yet, and I assume that when it
2 arrives we can go ahead and add it to the exhibit.

3 MR. AXELRAD: My best recollection is that the
4 document had been admitted subject to us providing the
5 correct one, but I have no objection to it being
6 admitted now if it was not admitted before.

7 MR. PIRFO: We have no objection whether it's
8 in or not in.

9 JUDGE BECHHOEFER: If it hasn't been admitted
10 before, it is admitted now. We'll let the reporter
11 figure out what to put in the index.

12 (CCANP Exhibit No. 72 admitted into
13 evidence.)

14 Q (By Mr. Sinkin) Mr. Frazar, I'm going to show
15 you what I ask be marked as CCANP 126.

16 (CCANP Exhibit No. 126 marked for
17 identification.)

18 Q (By Mr. Sinkin) Mr. Frazar, I think I'll just
19 skip a couple of steps here and ask you if Applicants'
20 counsel have represented to me that this is the HL&P
21 quality assurance manual that was in place at the time
22 of the Quadrex review, do you have any reason to doubt
23 that?

24 A No.

25 MR. SINKIN: Do we have a problem?

1 I should describe perhaps in some greater
2 detail what the document is. It's the quality assurance
3 manual which covers the introduction and the sections on
4 procurement and engineering only. It is not the entire
5 quality assurance manual.

6 A Also, I might observe, Mr. Sinkin, that you
7 also have two documents here.

8 Q (By Mr. Sinkin) Would you explain that to me?

9 A You have an excerpt from the quality assurance
10 manual starting at page 1-3 and ending on page 3-7 and
11 I'm not sure you've got everything in between there. It
12 appears that you do not have everything in between those
13 pages. And then you also have an excerpt from the South
14 Texas quality assurance plan which is a separate
15 document.

16 Q Those pages were not --

17 MR. AXELRAD: Could we have a brief recess?

18 MR. SINKIN: A brief recess, fine with me.

19 JUDGE BECHHOEFER: Pardon?

20 MR. SINKIN: A brief recess, please.

21 JUDGE BECHHOEFER: Yes.

22 (Discussion off the record.)

23 JUDGE BECHHOEFER: Back on the record.

24 Q (By Mr. Sinkin) Mr. Frazar, if you would
25 please explain CCANP 126, what that document contains.

1 A The excerpted portion in the front part of
2 this document with the title page quality assurance
3 manual and going -- for indexing purposes, if you start
4 at, using those page numbers there, 185731 that appears
5 on the first page and going through 185813, that
6 document or those pages are an excerpt from the Houston
7 Lighting & Power quality assurance manual which is a
8 document that defines the basic policy of the
9 corporation as it relates to quality assurance for
10 nuclear power plants.

11 Starting with page 185814 and continuing to
12 the end, those pages are excerpted from a separate
13 document called the South Texas quality assurance plan
14 which is a document that defines for the South Texas
15 Project the general methodology and organizational
16 responsibilities for carrying out the basic policies
17 that have been defined in the document I just previously
18 mentioned, the quality assurance manual.

19 The two taken together provide the basic frame
20 work for the quality assurance program in specific areas
21 on the South Texas Project. These two excerpts pertain
22 mainly to the engineering activities.

23 Q Thank you.

24 A But you must take the two together to get the
25 overall frame work.

1 Q Thank you.

2 MR. SINKIN: At this time, Mr. Chairman,
3 subject to that description, I would move CCANP 126 into
4 evidence.

5 MR. AXELRAD: No objection, Mr. Chairman.

6 MR. PIRFO: No objection.

7 JUDGE BECHHOEFER: I have a question.

8 I'll admit the document. The document's
9 admitted.

10 (CCANP Exhibit No. 126 admitted in
11 evidence.)

12 JUDGE BECHHOEFER: To get a complete view of
13 the basic frame work for engineering, the basic QA frame
14 work for engineering, would you need all of the
15 comparably numbered sections of both the manual and the
16 plan or is there some reason why the plan descriptions
17 here start with a page 4, the 4 series while the others
18 are all in the 3 series?

19 THE WITNESS: Judge Bechhoefer, the indexing
20 system for these two manuals were chosen independently
21 of one another. There's no correlation necessarily
22 between the sections in the manual and the sections in
23 the plan. The two manuals were organized functionally
24 and therefore had different indices that set them up.

25 JUDGE BECHHOEFER: Would I need to look at the

1 pages of the series numbers 1, 2 and 3 of the plan in
2 order to understand the pages of the series numbered 1,
3 2 and 3 or with dash something or other, but the 1, 2
4 and 3 series pages of the manual?

5 THE WITNESS: No, sir.

6 JUDGE BECHHOEFER: And, likewise, I wouldn't
7 need the pages numbered 4 something of the manual to
8 understand the plan? The plan pages which are
9 numbered --

10 MR. SINKIN: Mr. Chairman, I think there's
11 some confusion because the section numbered 3 that is
12 the manual covers procurement, the section numbered 4
13 that is the plan covers engineering.

14 JUDGE BECHHOEFER: I realize that. But do I
15 need -- is there a section 3 of the plan that also
16 covers procurement and do I need to read them together
17 to understand -- what I'm trying to find out is do I
18 need comparable sections of both in order to understand
19 one or the other?

20 THE WITNESS: If you're wanting to understand
21 the complete quality assurance program for the South
22 Texas Project in any given functional area, say,
23 procurement, for example, you would need to read the
24 relevant sections of the manual. And there may be more
25 than just one section that's relevant. And you would

1 also need to read the relevant sections of the plan.
2 And again, there may be more than one section that is
3 relevant.

4 And also, I might add, that it's even more
5 complicated than that. If you -- we're only talking
6 about Houston Lighting & Power here and there are other
7 documents that our contractors prepared and issued that
8 are also carrying on the basic charter of putting into
9 place a quality assurance program. So, depending on how
10 much detail you wanted to go into and how you wanted
11 to -- how much you wanted to know about how the quality
12 assurance program was being put in place and carried out
13 throughout the whole project, you'd have to go through
14 all of those documents.

15 JUDGE BECHHOEFER: Thank you.

16 MR. AXELRAD: Mr. Chairman, just to make sure
17 that the record is clear, Mr. Sinkin has made it quite
18 clear at various times that he doesn't expect counsel
19 for the other parties to understand what he's trying to
20 accomplish. And I can assure you that we have not
21 participated in the selection of these particular
22 sections. He wanted to get those sections into the
23 record. We agreed those sections are accurate. We're
24 not certain as to what they're in for and what else may
25 be needed for whatever purpose Mr. Sinkin wants them

1 for, but we don't want to argue about it.

2 MR. SINKIN: Well, Mr. Chairman, I -- you
3 know, I guess ideally given Mr. Frazar's description, we
4 would have in the record the sections on procurement and
5 engineering from the plan and the sections on
6 procurement and engineering from the manual.

7 Now, we had originally felt that the sections
8 on the manual would be enough to illustrate what we
9 wanted to illustrate in the record. So, we would be
10 satisfied if the appropriate section on engineering from
11 the manual could be provided. If based on the witness'
12 testimony it's considered that the matching sections of
13 the program and the manual are indeed what's necessary,
14 we certainly have no objection to those being in.

15 MR. AXELRAD: Well, there's no question of any
16 objection to anything. If Mr. Sinkin wants to have an
17 exhibit, he can set out his exhibits. I don't know what
18 he's not objecting to at this point.

19 MR. SINKIN: Well, you know, Mr. Chairman, we
20 attempted to produce what we thought was an exhibit of
21 the manual that turns out not to be through, as far as
22 I'm concerned, no fault of our own. The pages are
23 sequentially numbered as if this is all one document.
24 It was produced in discovery as all one document. It
25 means there was some mistake somewhere, that's all.

1 I'm not saying anything was done deliberately
2 wrong. But we have been led to believe that this was
3 the quality assurance manual sections on procurement and
4 engineering which is what we intended to introduce into
5 evidence and didn't have any idea until this morning
6 that these were something other than that.

7 MR. AXELRAD: I'd like to have Mr. Gutterman
8 respond to that, please.

9 MR. GUTTERMAN: Mr. Chairman, I don't think
10 we're raising any objection to these documents coming in
11 representing what they are. As far as I can see,
12 there's already an exhibit in the record from Phase I
13 that describes the QA program. It's a QA program
14 description, it describes the Brown & Root QA program
15 and the HL&P QA program. And I think to the extent we
16 need to look at any larger frame work to see how these
17 documents fit into the program, that's fine.

18 I do, however, have some problem with
19 descriptions that the CCANP representative is giving
20 that suggest in some way that these documents were
21 misrepresented during discovery. I resent that. I
22 don't know what basis there is for it and I certainly
23 know that I didn't misrepresent these documents in any
24 way. I don't believe I ever represented that these were
25 all part of a QA manual or that these were all part of

1 one document.

2 And the fact that they're stamped with a
3 number may be just showing that all these documents were
4 produced at the same time. They're obviously not the
5 page numbers from the documents, they're a Bates stamp
6 that was applied possibly in the course of document
7 production and possibly the person who was taking
8 discovery said, well, give me these pages of this
9 document and those pages of that one and somebody copied
10 them and Bates stamped them. That's quite possibly how
11 it happened.

12 At any rate, I resent any implication that I
13 misrepresented something here.

14 MR. SINKIN: There is -- certainly no such
15 implication was intended, Mr. Chairman. The document
16 was produced for the State of Texas in discovery. When
17 I went to look at the document, it was one document. It
18 had a little cover sheet on it which faintly Xeroxes, I
19 think, on the cover sheet of this that said "begin
20 copying" and it said "Houston Lighting & Power quality
21 assurance manual" on the cover. I then went into it,
22 took the sections I thought relevant to this proceeding
23 and copied them for introduction into evidence.

24 I'm not saying that Mr. Gutterman represented
25 anything to anybody. That was what I understood the

1 document to be based on the cover sheet that was on it
2 from the discovery, that's all.

3 MR. AXELRAD: Fine. At this point may I
4 suggest we move on to the next subject, Mr. Chairman.

5 JUDGE LAMB: I have one other point. It's
6 been mentioned that these pages are sequential. They
7 are not really sequential. They are sequential in part
8 or at least the ones in my copy are and I think if it's
9 important that they be sequential, we should look at
10 that.

11 JUDGE SHON: There are many gaps.

12 JUDGE LAMB: There are gaps in them. For
13 example, it starts with 185750 and it goes to 56 and
14 then jumps to 18783 something --

15 JUDGE SHON: I might --

16 MR. SINKIN: Well, that's because section 2 is
17 not there.

18 JUDGE LAMB: Right. But then it goes to
19 185842 and then jumps to 844.

20 MR. SINKIN: That is a 4, isn't it.

21 JUDGE SHON: There is also the fact that may
22 be confusing that section 4.0 engineering here under
23 4.2.2, let us say, says the areas of responsibility and
24 organization of Westinghouse Electric Corporation are
25 described in section 3.2.2, but if you turn to 3.2.2 in

1 this quality assurance program thing, there's nothing
2 said about that.

3 MR. GUTTERMAN: That's because that's a
4 different document, Judge Shon.

5 JUDGE SHON: That's what I mean. It shows
6 that there really isn't any connection here and we do
7 lack things that would clarify it.

8 MR. SINKIN: Maybe we can work this out at
9 some recess with the Applicants to put together the
10 sections of the manual, what would be responsive to the
11 cover page, the quality assurance manual of nuclear
12 power plants so that we have the appropriate section 4
13 on design, on engineering that would complete the
14 package for engineering as the manual. Maybe we can
15 work that out.

16 MR. PIRFO: It's with great reluctance I put a
17 dog in this fight, but I just want a clarification. As
18 the document stands now, whether it's the manual or the
19 plan, 126 has been presented to us, it's in evidence in
20 its entirety?

21 MR. SINKIN: That's correct.

22 JUDGE BECHHOEFER: That's correct.

23 MR. PIRFO: Fine. Thank you.

24 MR. AXELRAD: We have an exhibit in at this
25 point, Mr. Chairman. If the representative from CCANP

1 wants to discuss with us some revised form of the
2 exhibit, we'll be willing to talk to him. Again, we
3 make no commitment as to what those conversations will
4 result in.

5 JUDGE BECHHOEFER: Right. Also the record
6 will show exactly what's in there now, so --

7 MR. SINKIN: That concludes my
8 cross-examination, Mr. Chairman.

9 MR. PIRFO: The Staff has no cross-examination
10 of Mr. Frazar.

11

12 BOARD EXAMINATION

13 BY JUDGE LAMB:

14 Q (By Judge Lamb) I just have two or three
15 questions, Mr. Frazar.

16 First, what is the role of the HL&P
17 engineering assurance department?

18 A We regularly perform independent reviews of
19 the design of the South Texas Project in selected areas
20 as done by Bechtel for technical adequacy.

21 Q What was the role of the department in
22 connection with the review of the Quadrex report, do you
23 know?

24 A The department did not exist at the time the
25 Quadrex review was done. The engineering assurance

1 department was created in February of 1982 and the
2 program did not exist until or did not actually begin
3 functioning until January of 1983.

4 Q On page 4, question and answer 9 of your
5 testimony, to your knowledge was any restriction placed
6 or even suggested on the availability of this report to
7 this Board?

8 A Not to my knowledge, sir.

9 Q Did you have yourself anything at all to do
10 with the review of B&R engineering activities and
11 problems as revealed by the Quadrex report?

12 A No, sir.

13 Q Thank you.

14 JUDGE LAMB: That's all I have.

15 Q (By Judge Bechhoefer) Mr. Frazar, you
16 mentioned that after the Quadrex report was issued and
17 you understood it was going to be reviewed only at HL&P
18 headquarters or on site? Is that what you earlier
19 testified?

20 MR. AXELRAD: I'm sorry. Did you say by the
21 NRC? I didn't hear the whole question, Mr. Chairman.

22 JUDGE BECHHOEFER: By the NRC.

23 Q (By Judge Bechhoefer) Did you state that you
24 understood it was to be reviewed by those from NRC who
25 sought it either on the site or maybe at the

1 headquarters?

2 A When I was asked for a copy -- I assume you're
3 referring to the request that was made of me in August
4 of 1981 when Mr. Shannon Phillips and Mr. Herr --

5 Q Yes, yes.

6 A -- were in the offices?

7 When I ultimately was able to locate a copy, I
8 recall that basically we were to -- that we gave the
9 document to them and requested that they not copy the
10 document or take it away with them, that they review it
11 in the offices at that time and that we would also make
12 it available on site at some later date should they
13 decide to pursue the matter further. Which is,
14 incidentally, not unusual in the way that we handle
15 consultants' reports that come in from other
16 contractors.

17 Q Right.

18 Were you treating this as proprietary data?

19 A I personally didn't make any judgment at that
20 point concerning the data in the report. I had not read
21 the report, nor have I even read the report as of this
22 day. I simply was delivering a message from whomever
23 provided the copy to me for subsequent handing over to
24 the NRC.

25 Q So, as far as you know, the NRC personnel were

1 not told that the information was proprietary,
2 proprietary to HL&P?

3 A Proprietary in the sense of trade secret or
4 other information?

5 Q That's correct.

6 A As far as I know, we were not maintaining it
7 was proprietary.

8 Q Prior to the time that you were contacted by
9 the Staff, did you have any occasion to consider either
10 the confidentiality or the public informational
11 character of the report? Had you ever engaged in
12 conversations with anyone to that effect?

13 A You mean prior to the August of 198 --

14 Q Prior to the August occasion.

15 A No, sir.

16 Q While the report was being scoped, say, in
17 January, February 1981, during that time period were you
18 ever consulted about what questions Quadrex was to ask
19 or what areas Quadrex should cover?

20 A No, sir. I at that time was working at the
21 job site in Bay City and this organization of this
22 review was done primarily off site and I had no contact
23 with anyone concerning the scoping of the effort or
24 decisions regarding what was to be looked at.

25 Q Do you know whether anyone in the QA

1 department -- I know you mentioned Mr. Ulrey in one
2 aspect, but was anyone in the QA department consulted as
3 to the scoping of the report?

4 A Not to my knowledge.

5 Q The study I should say. The scoping of the
6 study?

7 A Not to my knowledge.

8 Q When was it that your successor found a copy
9 in your office? As you mentioned on page 3 of your
10 testimony, about when did that happen? Was that shortly
11 after he assumed his duties or was --

12 A I believe it was sometime in the summer of
13 1981. After I had left the job site, which I had left
14 essentially in June.

15 Q Were you told what had led Mr. Phillips and
16 Mr. Herr to request a copy of the report? That was
17 during the August time frame.

18 A No, sir, I don't believe I was. I don't
19 recall them mentioning it at all for what purpose they
20 would like to see a copy of the report.

21 Q Did they say what brought their attention to
22 the report?

23 A Not to my recollection, no, sir.

24 Q You mention in your answer to question 10 on
25 page 4 that -- you mentioned your knowledge that NRC had

1 been notified of three potentially reportable items.
2 Did you have any occasion to either know or discuss with
3 anyone or consider the documentation of those items,
4 first of those three items which was undertaken by HL&P?

5 A No, sir.

6 Q Did you have occasion to review the IRC memos
7 which related to these three items?

8 A No, sir, I don't believe I have.

9 Q Did you have any occasion to consider or
10 discuss, that you can remember, the documentation of the
11 items in the Quadrex report which were not reported?

12 A No, sir.

13 (No hiatus.)

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1 Q (By Judge Bechhoefer) Now, three separate
2 places in your testimony, you mentioned that in effect,
3 you had no significant concerns regarding B&R's
4 performance of engineering related portions of the QA
5 program. Would -- and I think you earlier testified that
6 you at least had no recollection of the -- I think two
7 audits that Mr. Sinkin brought to your attention. If you
8 had seen either or both of those audits at the time,
9 would you have had some concerns concerning the
10 engineering related portions of the QA program, from what
11 you've seen of them today or --

12 Q I read the documents, Judge Bechhoefer, and I
13 don't -- those documents and those types of reports had I
14 read them back then specifically in preparation for
15 testimony in Phase I would not have changed my testimony
16 at any point during those proceedings, nor do they change
17 my opinion of Brown & Root's engineering performance
18 today.

19 It was quite common for our auditors to go in
20 and do a very thorough and very exhaustive survey of the
21 Brown & Root engineering activities, it was not uncommon
22 to find types of problems that are mentioned in these
23 reports.

24 As a matter of fact, I probably would have been
25 more concerned had these types of reports not been in

1 existence because any time an organization is undertaking
2 a task such as this, there are going to be problems that
3 are going to be identified by quality assurance audit
4 program.

5 So I think these reports reflect to me that my
6 staff who was in the home office were looking very
7 carefully at Brown & Root's audit program, were
8 identifying problems, problems were being solved; some of
9 the problems were taking longer to solve than others did,
10 some of them took longer than we would have liked for
11 them to have taken. But nevertheless they were being
12 solved.

13 So those two audit reports having looked at
14 them today, certainly don't change my opinion regarding
15 Brown & Root's ability to generally carry out the QA
16 program and I certainly was left with no residual
17 significant concerns that would have been worthy of
18 mentioning during my testimony in the Phase I proceeding
19 which again were, in my mind primarily connected and
20 related to the construction QA program and matters
21 pertaining to the show cause order.

22 Q Well, if you were -- had an audit report that
23 and -- I'll just quote some of the language here and I
24 recognize you hadn't -- weren't familiar with this, but
25 if you had -- if your program had indicated that there

1 was a quote "breakdown of the B&R engineering program,"
2 is that usual language for these types of audits or does
3 that indicate something more severe than usual?

4 MR. AXELRAD: Could you point to the specific
5 page and --

6 JUDGE BECHHOEFER: That's the October -- the
7 Page 2, the second sheet, is not a numbered page two, the
8 second sheet of CCANP 123, the October 1, '79 document.

9 A First of all, Judge Bechhoefer, I guess you
10 recognize those are not my records and I didn't author
11 that document.

12 Q (By Judge Bechhoefer) I recognize that.

13 A If --

14 Q Do you know Mr. Stanley --

15 A I know Mr. Stanley. Yes.

16 Q -- or whoever signed for him.

17 A I know Mr. Stanley and I know Mr. Phillips. I
18 have -- having looked at this document, I don't think
19 that there's anything in here that in my mind constitutes
20 a breakdown in the engineering program.

21 The word "breakdown" is somewhat of a
22 subjective term and that I know of, there are no
23 objective standards on which to gauge a breakdown. I'm
24 not trying to minimize the significance of the things
25 that are called out in this particular report. But

1 without going into a lot more detail and studying the
2 underlying causes of the things that are mentioned here
3 and then trying to make some connection and see if
4 there's some pervasiveness of the things that are
5 mentioned here throughout the engineering organization, I
6 certainly wouldn't have chosen that word to characterize
7 what's mentioned in this report from just what I read in
8 this document.

9 I don't feel like that any point in time, there
10 was any pervasive breakdown in Brown & Root's ability to
11 perform their engineering activities in conformance with
12 quality assurance requirements. There were, as these
13 documents illustrate and as other audit reports
14 illustrate, examples of where they failed to comply with
15 their own procedures. But the significance of those
16 particular findings is something that has to be looked at
17 very carefully when judging whether or not you have what
18 is reflected in 10 CFR 50 55(e) as a significant
19 breakdown in the quality assurance program. And I don't
20 get that from the types of things that I see in these
21 reports.

22 Q If you, and I recognize you were not personally
23 involved, but if you received an audit report from your
24 auditors and your auditors concluded that there was a
25 breakdown in a portion of the program, would you think

1 that that type of a report should be immediately
2 forwarded to the incident review committee?

3 A It's difficult to judge that on its face, Judge
4 Bechhoefer. I'd need more facts to go with that. If the
5 basis on which the person made that statement was one
6 that they had found first a significant and secondly a
7 pervasive problem that transcended through many different
8 areas of activities or many different parts of the
9 engineering, then I certainly think that it would bear
10 further investigation.

11 But to simply take somebody's statement at face
12 value that there was a breakdown and then conclude that
13 it's got to go to the IRC is not the way that I'm
14 accustomed to implementing our procedures. And I think
15 the procedures prescribe a fairly carefully thought out
16 process for making decisions that are again judgmental
17 decisions, that are based on merit, not just on a whim or
18 somebody's individual thoughts. We usually get many
19 people involved in looking at these things in order to
20 bring the best minds to bear on these decisions.

21 So I guess the bottom line is I don't think it
22 would automatically mean that it had to go to the IRC.
23 There might be further investigation necessary.

24 Q What would happen if you take the later stage
25 of this one but only take it as an example, and turn to

1 the December 26th memo, your memo here, where the B&R
2 corrective action responses were considered
3 unsatisfactory. Would that set the stage for -- this is
4 from -- three pages -- four pages from the end.

5 A Yes.

6 Q It's your memo of December 26th, '79, where you
7 describe or you view the -- you inform Brown & Root that
8 some of their corrective actions are unsatisfactory.
9 Does this reach the stage where you, at least, might
10 evaluate that as an indication of a breakdown that should
11 be forwarded to the IRC?

12 A No, sir, it does not. It's not unusual for
13 organizations to disagree over what is an appropriate
14 response to a particular quality assurance audit finding.
15 And sometimes it takes two or three tries to finally come
16 to agreement and come to terms. That's what we have
17 here.

18 We sent the findings to Brown & Root, they gave
19 us a response, we evaluated the response and decided that
20 certainly their responses were unsatisfactory.

21 If you turn to attachment one, where it lists
22 the seven items, it goes through and identifies the basis
23 on which we disagreed with the Brown & Root response.
24 And in reading those, scanning those very quickly, I find
25 that there is no pervasive connection between those

1 individual ADR's and their response to them, nor do I
2 find in there that there's a matter of a significant
3 deficiency in design or construction identified which is
4 always the first thing that I look for when identifying
5 something that needs to potentially go to the incident
6 review committee.

7 Most of these responses deal more with the
8 administrative control process and the adherence to
9 various procedures and documents that the Brown & Root
10 organization had then in place to govern their
11 activities, in different areas, or different activities.

12 Q Now, I know you were less familiar with CCANP
13 125 than with CCANP 123, but if you viewed 125 as a
14 continuation to some extent of some of the difficulties
15 mentioned in CCANP 123, does this -- and particularly the
16 comments on the seconds page of 125, to the effect that
17 B&R had never corrected some of the matters apparently
18 which arose in this earlier audit; does that -- does that
19 seem to state or in your mind would that signify that a
20 significant breakdown was occurring or had occurred?

21 A No, sir. Again, without going back and doing
22 today another comparison of all the detailed findings in
23 here --

24 Q Right, I'm not asking to you do that.

25 A I know you're not asking me to do that. But

1 from what I read in these documents, I don't draw a
2 conclusion that there's any substantive, significant
3 issue here that is a deficiency in design or
4 construction, nor do I draw any pervasive connection
5 between these various concerns that leads me to make the
6 judgment that there is a significant breakdown in the QA
7 program.

8 These findings and these two audit reports, or
9 these excerpts from two audit reports, are not unlike the
10 findings from audit reports that I have seen on this
11 project and even audit reports that I have seen on other
12 projects in my career in nuclear power.

13 It's not uncommon for quality assurance
14 auditors to go into an engineering area or a construction
15 area, for that matter, and find examples where people
16 have failed to follow procedures, and to ask for those
17 items to be corrected; not corrected for their specific
18 sense but corrected in terms of what should be done to
19 preclude recurrence.

20 And that's the process that these audit reports
21 carry us through. And that's how we solve identify and
22 solve problems, that's the whole purpose for their audit
23 program.

24 But as far as reportability, that's a whole
25 'nother matter and it starts in my mind with an existence

1 of a significant deficiency in design or construction.
2 And then you go to -- when you have that condition, then
3 you go to evaluate } if any of those conditions also
4 represent the other criteria that are in 55(e).

5 But I don't see in any of this, the deficiency
6 in design or construction nor do I see the pervasiveness
7 that would be required to judge that this was a
8 significant breakdown in the QA program.

9 Q Does the circumstance that Brown & Root had
10 either been unwilling or unable to follow through on some
11 of these corrective actions for what appears to be like a
12 year, would that indicate that there was some
13 pervasiveness?

14 A No, sir, it would indicate that they either
15 didn't understand what we were asking them to do or that
16 they had lost sight of what they were to do; certainly
17 would indicate that there was a need for follow up on our
18 part to ensure that they did it. But it wouldn't
19 necessarily indicate that there was a breakdown in the QA
20 program; it would indicate that they failed to follow
21 through on something that we had asked them to do for one
22 reason or another and that we needed to look into it that
23 and find out why that was and get those actions in place
24 to address those matters.

25 Q Would their QA program include procedures for

1 tracking -- I'll use the word commitments, I'm not sure
2 it's the right word -- but commitments to take corrective
3 action?

4 A There was an evolution on the project over a
5 period of years of more and more formality on the part of
6 Brown & Root in terms of tracking commitments that they
7 had made for which they were responsible and carrying out
8 the actions.

9 I don't recall in the time frame of of these
10 two audits, '79 and '80, exactly what the state was at
11 that point. I do recall that during the time the show
12 cause order principally from 1980 to 1981, that we
13 ultimately got very formal about identifying commitments
14 and tracking those and verifying that actions had been
15 taken responsive to those commitments. There were
16 several hundred and maybe even thousands of commitments
17 that were made during that period. And we found a need
18 to get much more formalized.

19 Q Now, I have no basis for knowing whether the
20 ALARA questions pointed out by the Quadrex report are
21 similar or the same to the ALARA questions which were
22 raised in certain of these audits. But if there were a
23 similarity to the items, would the Quadrex report items
24 take on a safety significance which they would not
25 otherwise have absent the earlier audits?

1 MR. AXELRAD: Mr. Chairman, I'm not sure what
2 the word "similarity" in your question, means and how it
3 could be addressed by the witness. Obviously, if the
4 type of items that a QA auditor found are the same, then
5 those are similar. Are you asking if that is the case --

6 JUDGE BECHHOEFER: If that were so, I'm not
7 sure that these are the same and I'm not sure that Mr.
8 Frazar could even tell from the quick cursory glance
9 whether they are the same.

10 Q (By Judge Bechhoefer) But I'm just saying if
11 they were the same, would that have significance from a
12 safety standpoint?

13 A I don't know how to answer your question, Judge
14 Bechhoefer. When you say significance from a safety
15 standpoint, in my mind, that's puts me in the position of
16 having to make a technical evaluation of a hypothetical
17 problem about which I know no facts. Safety significance
18 is determined by examining the plant design and
19 determining the effect of that whatever deficiency you're
20 talking about on the operation of the plant.

21 And without additional facts in your question,
22 I just -- I can't answer the question.

23 Q Assume for this -- just purely hypothetical.
24 Assume that the ALARA problems or questions pointed out
25 by the Quadrex report were the same -- use the same

1 matters as raised in the two audits. Would that at least
2 tend to indicate that there was a breakdown in the QA
3 program, in the ALARA area?

4 MR. AXELRAD: Are you asking him to assume that
5 these two documents show in his view a breakdown in the
6 ALARA program?

7 JUDGE BECHHOEFER: No. I'm asking him to
8 assume that the documents -- that the two audit -- the
9 items in the two audits are the same as items in the
10 Quadrex report. I don't know whether they are or not.
11 But if they were, would that -- would the Quadrex items
12 then tend to illustrate a breakdown, a QA breakdown?

13 A Okay --

14 MR. AXELRAD: Mr. Chairman, what he has looked
15 at are these documents and he's said something to the
16 effect that these did not, in his view, reflect a
17 breakdown.

18 JUDGE BECHHOEFER: Right. But what I'm trying
19 to say is if Quadrex found that they were still
20 continuing in April and May -- if that were the finding.

21 MR. AXELRAD: I see. It's a continuation that
22 you're asking about.

23 JUDGE BECHHOEFER: Yes. That's what I'm trying --
24 the intent was if that all these items were the same and
25 you had the practices carried out essentially nine months

1 later than the October '80 audit which was the laft of
2 these two -- the October '80 audit is CCANP 125.

3 Q (By Judge Bechhoefer) If it still continued
4 through the spring of '81 and that was what Quadrex
5 found, and Quadrex so found, the items that Quadrex
6 pointed out, if they were the same, would that tend to
7 indicate that there was a QA breakdown in the ALARA area?

8 A If I assume that Quadrex findings were
9 precisely the same as are identified here and again, I
10 don't think I have the total findings, yeah, I don't have
11 the total findings and the only thing I can rely on,
12 Judge Bechhoefer, is Page 3 of this document which is a
13 memorandum dated October 1st, prepared and signed for me
14 by Mr. Phillips, paragraph 3 identifies the ALARA -- or
15 or at least summarized the ALARA concerns, and if I
16 assume that the Quadrex report identified precisely the
17 same findings, then I think there would be a basis for
18 investigating quality assurance implications of that to
19 determine why those conditions still existed and then one
20 might be in the position of making a judgment as to
21 whether or not there was a QA breakdown.

22 You can't just -- just the time or just the
23 repetition of a particular finding doesn't necessarily
24 lead one to conclude that there's a breakdown in the
25 quality QA program. It's a matter of judgment, it's one

1 that has to be looked at in some detail to make that
2 judgment. And I don't have enough facts here to really
3 allow me to make that conclusion.

4 Q Now, continuing the same assumption, would the
5 investigation or the further investigation you just
6 mentioned be performed by the QA side of the house or
7 would that then be sent to the incident review committee?

8 A Portions of it would be done by the QA
9 department, at least an initial investigation. Assuming
10 first of all you have the Quadrex report, okay, that's
11 not a document that was prepared by the QA department, it
12 was done by someone else; it's a consultant's report
13 that's handed over to you that contains some alleged
14 deficiencies; if you assume that the findings in there
15 closely resemble or exactly the same as what's here, then
16 portions of that would fall in the bailiwick of the QA
17 organization to look at that.

18 Portion of them do not -- portions of them fall
19 into the engineering area. But in any event, before any
20 deficiency evaluation form, which is the initiating
21 mechanism for the IRC to get involved, before that would
22 be written or initiated, I would think that there would
23 need to be some review of the circumstances and the
24 underlying facts for each of these findings and then it
25 would be turned over to the IRC.

1 JUDGE BECHHOEFER: That's all I have.

2 Q (By Judge Shon) I'd like to look a little
3 closer as this ALARA business.

4 First of all, I note that the ALARA finding in
5 October of '79, the letter signed for you or the
6 memorandum signed by Mr. Phillips for you to Mr. Turner,
7 October 1st, said the first problem is in shielding -- in
8 the shielding design calculations and ALARA review
9 because of the following deficiencies.

10 And it goes on about no contract being issued
11 to NUS, no requirements for review or approval of the
12 shielding design calculations and so on.

13 Later, when Quadrex reviewed this, they found
14 at least one finding, 4.8.2.1(b) that said no procedures
15 exist that define minimum qualification requirements for
16 ALARA reviewers.

17 Are these two things the kind of things that
18 Chairman Bechhoefer had suggested would be similar, that
19 is the sort of things I see listed in the paragraph in
20 your memo to Mr. Turner and the sort of things that I see
21 a failure to define minimum requirements for ALARA
22 reviewers, would one of these lead to the others and
23 could this be a persistence of something that isn't
24 proper?

25 A I certainly don't see a direct connection of

1 the statement in that third pair of that October 1st
2 memorandum and what you've just explained is from the
3 Quadrex report.

4 Q I'll read the whole finding from the Quadrex
5 report. I don't read it entirely, regarding ALARA.
6 There may be others, but I note this one concerns ALARA,
7 it says no procedures exist that define the maximum
8 qualifications requirements for ALARA reviewers; some
9 design drawings have been reviewed and signed off for
10 ALARA.

11 There is limited evidence that proper follow-up
12 has occurred to verify corporation of ALARA specified
13 designs, and that's all it says. You think that is not a
14 real tight connection?

15 A I just don't have enough facts there, Judge
16 Shon, without looking into it further to see if there is
17 a connection.

18 Q I'd like to ask you one other fundamental
19 question about ALARA and you're attitude toward it,
20 although I realize you don't make decisions on
21 reportability under 50.55(e).

22 Did one of the overall requirements for such a
23 report is that the deficiency must have the potential, if
24 left uncorrected, to adversely effect the safety of plant
25 operations. Would a failure to properly review design

1 for ALARA fall in that category?

2 A Not in my opinion, Judge Shon. ALARA, as I
3 understand it, is a program that's put in place primarily
4 to evaluate and improve the plant design and operation so
5 that you minimize the exposure of the plant workers to
6 radiation through the course of the plant operations
7 phase.

8 In my view, 55(e) is aimed at a different
9 target, and that target is safe operation in the sense of
10 protection of the health and safety of the public and
11 releases, 10 CFR Part 100. I think the two are divergent
12 in that respect.

13 Q Thank you.

14 A ALARA has more to do with efficient management
15 of the plant and the need to minimize risk to workers so
16 that we don't take unnecessary exposure to our workers.

17 JUDGE SHON: Thank you, that's all I have.

18 JUDGE BECHHOEFER: Mr. Axelrad? Do you want a
19 little break?

20 MR. AXELRAD: I would suggest it's 12:00
21 o'clock anyway, why don't we break for lunch at this
22 time, say until 1:00 o'clock? And during that period,
23 well be able to evaluate whether we do have any redirect.

24 And I would expect that both the redirect and
25 the additional cross-examination could be completed

1 quickly after lunch and we can start with Mr. Wisenburg.

2 JUDGE BECHHOEFER: Why than don't we break for
3 lunch then. Let's have an hour and fifteen minutes,
4 until 1:15.

5 JUDGE BECHHOEFER: Off the record.

6 (Luncheon break.)

7 (No hiatus.)

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1 JUDGE BECHHOEFER: Back on the record.

2 Mr. Gutterman or Axelrad?

3 MR. AXELRAD: Applicants have no redirect
4 examination of Mr. Frazar, Mr. Chairman.

5 JUDGE BECHHOEFER: Mr. Sinkin?

6

7 RE CROSS EXAMINATION

8 BY MR. SINKIN:

9 Q Mr. Frazar, how did you know that your
10 successor as HL&P project QA manager found a copy of
11 Quadrex at the site?

12 A I spoke with him recently.

13 Q Recently you learned that?

14 A Yes.

15 Q And what he said was when he took over from
16 you, he found it in the office?

17 A He said that there was a copy of the report
18 there at the office at the site.

19 Q At the office, okay.

20 Have you worked on any other nuclear power
21 projects besides the South Texas Nuclear Project?

22 MR. AXELRAD: Mr. Chairman, I don't understand
23 how that question is relevant to the questions that were
24 asked by the Board.

25 MR. SINKIN: It relates to the --

1 JUDGE BECHHOEFER: You can ask --

2 MR. SINKIN: I'm just trying to clarify it.

3 A I think in one of my answers this morning I
4 referred to the fact that it was not uncommon in my
5 experience to see quality assurance audit reports that
6 had the kinds of findings that we were talking about
7 either on this project or other projects. What I rely
8 on there is the fact that I have seen audit reports that
9 were generated on other nuclear power plant projects.

10 Q (By Mr. Sinkin) In response to questioning
11 from Judge Shon about ALARA, are you saying that ALARA
12 does not fall under Appendix B?

13 A I'm not sure I understand your question, Mr.
14 Sinkin. What do you mean by fall under Appendix B? Can
15 you clarify that?

16 Q Is that an activity governed by Appendix B,
17 the ALARA design and process -- the ALARA design
18 process?

19 A I think certainly that ALARA, to the extent
20 that it involves the performance of engineering
21 calculations that result in shielding design and other
22 measures designed to protect the workers in the plant,
23 is certainly a very very important activity. But in the
24 strict sense of whether or not the ALARA process is
25 safety-related in the original context of Appendix B in

1 1970, no, I don't feel it is mandatory that that program
2 be conducted with all of the rules under Appendix B.

3 We certainly, and I think most engineering
4 organizations do, employ similar kinds of procedures for
5 carrying out the calculations and doing the design work
6 as you would in any other safety-related portion of the
7 plant.

8 Q When looking at CCANP 123, the audit BR-28,
9 the cover letter seems to indicate that this is a
10 quality assurance audit by Houston Lighting & Power to
11 verify implementation to the requirements of Appendix B,
12 among other things.

13 Did Houston Lighting & Power approach the
14 ALARA design process as a process that they would
15 consider falling under Appendix B in September of 1979?

16 MR. AXELRAD: Mr. Sinkin, you've deleted from
17 your question the other things that you just said,
18 Appendix B and other things.

19 MR. SINKIN: Well, it says it's to verify the
20 implementation of requirements of Appendix B, ANSI N45.2
21 and the Brown & Root engineering procedures. There's an
22 "and" there. All three of them supposedly apply. So,
23 I'm asking whether HL&P viewed Appendix B as applying to
24 the ALARA design review process in September of 1979.

25 A This audit was conducted of the Brown & Root

1 engineering organization activities on the South Texas
2 Project. ALARA was only one of a number of areas that
3 were probed during the audit.

4 We always approach quality assurance audits in
5 the basic frame work of Appendix B requirements and the
6 engineering procedures that govern the activities on the
7 project. If you look in that audit report over -- it's
8 actually on the last page of the audit, what I think of
9 as the -- in this package the audit itself, it's a page
10 that's headed at the top Discussion and then further
11 down there's a summary and then there's a signature of
12 David R. Valley at the bottom. It identifies nine areas
13 that were probed during this particular audit. All of
14 those -- many of those areas fall under Appendix B.
15 ALARA happened to be one of the areas that we chose to
16 examine because it was governed by Brown & Root
17 engineering procedures and we audited that area.

18 I don't recall specifically that we maintain
19 any corporate position that ALARA activities are
20 mandatory to be included under Appendix B as far as
21 safety-related design activities goes.

22 Q (By Mr. Sinkin) So, the quality assurance
23 audits of HL&P would audit activities that were not
24 covered by Appendix B?

25 A Absolutely. We audited many many different

1 areas that were not covered, per se, under Appendix B,
2 but nevertheless were important to us as an owner in
3 designing and constructing a nuclear power plant.

4 I might add that in the second page of this
5 document that I have, CCANP 123, the second paragraph of
6 that October 1st memorandum from Mr. Stanley to Mr.
7 Barker, it just says, "The recommendation is that Brown
8 & Root be required to review" -- I'm sorry, the second
9 paragraph recommends engineering review of the shielding
10 design ALARA review documentation to assure no
11 regulatory requirements have been violated.

12 . * So, basically I take it from that that the
13 people who were doing the audit and Mr. Stanley even
14 with the findings that were generated during this audit,
15 that they haven't specifically identified that any
16 regulatory requirements have been violated, but more
17 that there's a lack of adherence to some procedures in
18 the Brown & Root engineering organization.

19 Q And does the Brown & Root quality assurance
20 manual govern activities other than those that fall
21 under Appendix B?

22 MR. AXELRAD: Mr. Chairman, I don't understand
23 the relevance of that question to any of the matters
24 that were brought up by the Board. We have limited
25 recross at this point based only upon the Board's

1 questions and I think that CCANP at this point is going
2 beyond the scope of what the Board was questioning on.

3 MR. SINKIN: Mr. Chairman, I'm just still
4 trying to clarify the witness' view of ALARA versus
5 Appendix B versus how it was treated at HL&P. It's the
6 same area of questioning.

7 JUDGE BECHHOEFER: I think there's enough
8 connection. We'll overrule the objection.

9 Q (By Mr. Sinkin) Do you remember the question,
10 Mr. Frazar?

11 A Yes, I remember the question and I don't know
12 how to answer the question because it's not sufficiently
13 specific. You say the Brown & Root QA manual. At what
14 point in time, what section of the Brown & Root QA
15 manual? There are some specifics that are missing from
16 your question that won't allow me to answer it right
17 now.

18 Q Let's say at the time of this audit, September
19 1979, did the Brown & Root quality assurance manual
20 govern activities other than those under Appendix B?

21 A I don't know. Unless you could guide me to a
22 particular section of the manual and ask me about that
23 section, it's impossible for me to answer that. I don't
24 have that document in my memory.

25 MR. SINKIN: Do we yet have the front page of

1 that document available?

2 No?

3 Q (By Mr. Sinkin) Well, we'll try from the
4 August 1981 Brown & Root quality assurance manual, the
5 introduction. If you can tell me from your review of
6 that page whether that quality assurance manual was
7 designed to cover activities other than those conducted
8 under Appendix B?

9 A Are you speaking with reference to just this
10 first page?

11 Q If you want to look at the whole exhibit, the
12 exhibit officially is the one you looked at earlier,
13 CCANP 72, it's just missing that cover page.

14 JUDGE BECHHOEFER: Presumably it's missing a
15 cover page.

16 MR. SINKIN: A cover page of some sort, yes,
17 not necessarily that same exact page.

18 A Well, I can identify at least one thing in
19 this cover page that would allow me to say yes, that
20 their manual would include and cover items that were
21 other than safety-related as defined in the federal
22 regulations.

23 Q (By Mr. Sinkin) What is that that you see?

24 A In the third paragraph it says, "The objective
25 of this quality assurance program is to insure safe,

1 reliable construction and to provide confidence that
2 Code items," capitalize code, "and other safety-related
3 work are designed, procured, fabricated and installed in
4 accordance with the rules established in the Code,"
5 capitalized again, "and regulatory documents."

6 The code that they are referring to there is
7 primarily the ASME boiler and pressure vessel code and I
8 know that Brown & Root had responsibility not only for
9 safety-related construction under Section 3 of the code,
10 but there are many cases where they did work under
11 Section 8 of the code on unfired pressure vessels. And
12 I think they used the same basic requirements in their
13 QA program to carry out many of those activities, such
14 as control of welding, design of pressure vessels,
15 calculation of stresses in piping, et cetera, et
16 cetera. All of those are activities that are governed
17 by their quality assurance program that were done in
18 accordance with the same procedures that were done for
19 safety-related work.

20 Q One last question, Mr. Frazar. If you had a
21 design process that was not under Appendix B but you
22 discovered that that design process was being performed
23 in an uncontrolled way or otherwise dysfunctionally
24 performed, could you have a significant quality
25 assurance breakdown in your understanding of 50.55(e)?

1 MR. AXELRAD: Now, I'd just like to make sure
2 I understand what the question is. A design process not
3 under Appendix B means a design process that does not
4 deal with safety-related matters as Appendix B
5 specifies?

6 MR. SINKIN: Well, we can even put it in the
7 context of ALARA. Let's just do that.

8 Q (By Mr. Sinkin) Let us say you had the ALARA
9 design process and your quality assurance auditors found
10 that, in fact, there had been a breakdown in the
11 quality -- in the performance of the ALARA design
12 process. Let's just assume that as a given. You agree
13 with them, let's assume that as a given.

14 Do you then have a matter that you would
15 consider a potentially reportable finding under
16 50.55(e)?

17 MR. AXELRAD: I'm sorry, can I have the
18 introduction to that again? If you had a process that
19 did what?

20 Q (By Mr. Sinkin) You had a breakdown in the
21 ALARA design process, how is that? Is that a
22 potentially reportable deficiency under 50.55(e)?

23 A If I assume that the problem that you're
24 alluding to is confined strictly to ALARA activities, I
25 think it would be very difficult to establish the first

1 condition for reportability under 55(e), that being a
2 significant deficiency in design or construction which
3 if left undetected would affect the safe operation of
4 the plant.

5 Q I'm really going at the second criteria,
6 significant breakdown in the quality assurance program.

7 A That isn't the second criteria.

8 Q I'm sorry.

9 A I'm looking at 10CFR 50.55(e)(1) and I'll
10 begin in the middle. "Shall notify the Commission of
11 each deficiency found in design and construction which,
12 were it to have remained uncorrected, could have
13 affected adversely the safety of operations of the
14 nuclear power plant at any time throughout the expected
15 lifetime of the plant and which represents" --

16 Q Okay, you were looking at that first section
17 then and saying --

18 A That's correct.

19 Q -- in the significant deficiency section you
20 would already be ruling this out?

21 A That's correct.

22 Q So, you do not view the ALARA process as
23 related to the safe operation of the plant, that's what
24 we're establishing?

25 A In the context of this regulation, safe

1 operation I view to be the capability that's mentioned
2 to bring the plant to cold shutdown, to mitigate the
3 consequences of accidents, you know, the various
4 conditions that have been set up by the regulations that
5 define what safety-related is. Okay? And ALARA doesn't
6 in my view fit under that definition of safety-related.

7 It's by no means a minimal or minor activity.
8 It's an important activity. It's one that the
9 Commission saw fit to issue guidance on and require
10 applicants to undertake to minimize exposure to workers
11 in these plants and to achieve or to do at least an
12 evaluation of the effect and the trade-offs in design in
13 ALARA so that you can minimize exposure to workers.

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

15 JUDGE SHON: I have one thing to follow on
16 that, Mr. Frazar.

17 THE WITNESS: Okay.

18 JUDGE SHON: Consider Appendix I to Part 50.

19 THE WITNESS: Okay. Appendix R.

20 JUDGE SHON: I.

21 THE WITNESS: Oh, Appendix I.

22 JUDGE SHON: Yes. That discusses releases,
23 does it not?

24 THE WITNESS: I'm not sure, Judge Shon, I'm
25 not --

1 MR. AXELRAD: Judge Shon, before we go any
2 further, I believe that the context in which ALARA was
3 being discussed throughout here was the --

4 JUDGE SHON: Oh, yes.

5 MR. AXELRAD: -- plant operating to personnel
6 exposures and not ALARA insofar as it may involve
7 effluent releases or things of that kind.

8 JUDGE SHON: I was attempting to develop
9 exactly that, Mr. Axelrad.

10 MR. AXELRAD: I'm sorry.

11 MR. SINKIN: He makes a good witness.

12 JUDGE SHON: The point I wanted to make was
13 that there is a context in which the term ALARA or as
14 low as reasonably achievable has been used as a way of
15 protecting not just the workers but the general public
16 and that it is dealt with in Appendix I. And I wanted
17 to make certain that the ALARA you were talking about,
18 the sort of ALARA difficulties that Brown & Root had
19 failed to design out of the plant were not that kind but
20 were the kind that protect the workers within the
21 plant.

22 THE WITNESS: That's correct, Judge Shon. I
23 was referring to such things as shielding calculations
24 that are mentioned in this audit report which are
25 obviously within the plant and are designed to protect

1 the workers in the plant and that sort of thing.

2 JUDGE SHON: Thank you.

3 THE WITNESS: So, it was in that context that
4 I was referring to that.

5 JUDGE SHON: I just wanted to establish the
6 restriction of the answers you were giving.

7 JUDGE BECHHOEFER: Mr. Reis, I want to ask
8 maybe the same question you want to ask, but, if not,
9 you may want to follow up on it.

10 Mr. Frazar, would your counsel show you Mr.
11 Taylor's testimony for the Staff and in particular
12 answer 154 on page 50.

13 MR. REIS: On page what?

14 JUDGE BECHHOEFER: Fifty.

15 In view of the -- I would like -- in answer
16 154, I would like to know will you agree with or what
17 your view is of the statements which start on the fifth
18 line of the answer where it says, "I would like to point
19 out," from there through the next page up to the
20 sentence starting "Taken in this light." In other
21 words, through the seventh line of page 51.

22 Do you agree with that? And, if not,
23 explain.

24 THE WITNESS: Judge Bechhoefer, I'm not sure
25 without, you know, having read a lot more references and

1 in particular the Quadrex report that I could --

2 JUDGE BECHHOEFER: Well, I wasn't referring to
3 the portion about the Quadrex report, but just to the
4 Staff's description of the legal effect of ALARA.

5 THE WITNESS: I have no basis for disagreeing
6 with them.

7 JUDGE BECHHOEFER: Well, it seemed to me that
8 your description was somewhat inconsistent with those
9 sentences that I --

10 THE WITNESS: Well, with the limitations that
11 I provided in response to Judge Shon, talking about in
12 plant ALARA considerations of minimizing risk to plant
13 workers, I have not generally held the view that those
14 kinds of ALARA activities from a design standpoint are
15 safety-related and fall under Appendix B.

16 JUDGE BECHHOEFER: All right. Well, doesn't
17 Mr. Taylor state exactly the opposite? Mr. Taylor
18 points out both Appendix I, but he also talks about the
19 other aspects of ALARA. And my question to you is isn't
20 your answer inconsistent with Mr. Taylor's?

21 MR. AXELRAD: Mr. Chairman, I'm not quite sure
22 that I can see where in Mr. Taylor's testimony there was
23 any explicit reference to Appendix B.

24 THE WITNESS: I don't see that either.

25 MR. AXELRAD: There were references to

1 commitments that may be contained in technical
2 specifications and the FSAR, but I don't see any direct
3 tie-in of those matters to Appendix B matters.

4 JUDGE BECHHOEFER: That's the next question.
5 Does not Appendix B control the way a licensee or an
6 Applicant or a licensee carries out its commitments made
7 in the PSAR or FSAR?

8 THE WITNESS: No, sir, not necessarily.
9 Appendix B is a basic regulation that prescribes the
10 content of the QA program. We have many different
11 procedures and commitments and we have a safety analysis
12 report that goes well beyond the limits of Appendix B
13 and talks about many other related matters and it's the
14 safety analysis report and the other related licensing
15 documents that prescribe what our commitments are and we
16 follow through on the basis of those commitments. It's
17 not just Appendix B, it's much broader than that.

18 And I don't see that this answer of Mr.
19 Taylor's here necessarily is addressing the same
20 question I'm addressing of whether or not Appendix B is
21 strictly applicable to the type of ALARA design
22 calculations we're talking about in this audit report.

23 JUDGE BECHHOEFER: Back to you, Mr. Reis. I
24 just wanted to put that on the record and I don't know
25 if you had intended to follow-up in that area or not,

1 but --

2

3

RE CROSS EXAMINATION

4

BY MR. REIS:

5

Q Mr. Frazar, as I recall, you said that the

6

FSAR and the PSAR of Houston Lighting & Power would have

7

to cover ALARA items --

8

A Yes.

9

Q -- and require that.

10

A As I understand it, yes, sir.

11

Q And in the FSAR itself, it prescribes quality

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for matters that might not be Appendix B components and

13

things?

14

A That's correct.

15

Q And those quality assurances have to be met by

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the Applicant whether or not they are covered by

17

Appendix B, isn't that so?

18

A That's correct.

19

Q Okay. Going to 50.55(e) and looking at, first

20

of all, paragraph 1, you see -- before we get to --

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50.55(e) 1, before we get to small "i". Do you see any

22

limitation there as to safety of operation between a --

23

a dichotomy between members of the public and employees

24

at the plant?

25

A Not specifically in the language of that

1 paragraph. I'd have to say that in my experience, the
2 interpretation of the phrase safety of operations has
3 generally been interpreted to mean those matters that I
4 referred to earlier pertaining to bringing the plant to
5 a shut down condition, mitigating accidents, et cetera.

6 Q In mitigating accidents or bringing a plant to
7 a shut down position, aren't you also concerned with the
8 safety and to maintain radiological exposure to
9 employees as low as possible?

10 A We have a responsibility for that, yes, we
11 sure do.

12 Q I see. And when you go to "ii", does that
13 require that you report matters that do not conform with
14 your safety analysis?

15 A Such that the design does not conform to the
16 criteria and bases stated in the safety analysis report
17 in the construction, yes, sir.

18 Q So that if your design does not conform with
19 the design set out in your safety analysis as to ALARA
20 equipment or walls or what have you, let's leave it
21 ALARA walls or barriers to maintain exposures as low as
22 reasonably achievable and that could affect safety of
23 operation, you would have to report that under 50.55,
24 would you not?

25 A Mr. Reis, I don't know if I could make that

1 judgment without getting some additional technical
2 inputs from people that do design in that area. I'm not
3 a design engineer in the ALARA area and I'm not sure how
4 those engineers would input to that decision concerning
5 reportability.

6 From a quality assurance standpoint --

7 Q So --

8 A From the quality assurance standpoint, which
9 is the discipline that I've worked most of my career in,
10 when you get into questions of whether or not
11 significant deficiency in final design does or does not
12 conform to the criterion and bases stated in the safety
13 analysis report, I'd have to rely on the engineers to
14 make that judgment.

15 Q So, you don't know whether an ALARA matter
16 could or could not require reporting under 50.55(e)?

17 A In that particular case that you described,
18 that's correct.

19 Q One other matter. Is there also a requirement
20 that you apply -- are you familiar with Appendix A to
21 Part 50 of the NRC regulations?

22 A Generally, but I don't have it in my memory,
23 obviously.

24 Q Looking at criterion 1, isn't there a
25 requirement, application of quality assurance standards

1 as to matters that might not be covered in Appendix B?

2 A You're looking at Part 50, Appendix A --

3 Q Criteria --

4 A -- under criteria -- Roman Numeral I,

5 criterion 1?

6 Q That's right.

7 MR. AXELRAD: Mr. Chairman, I would like to
8 object to the line of questioning based upon Appendix
9 A. This witness has not testified to any matters
10 relating to any questions of that type. I think we're
11 really straying beyond the type of inquiry that was
12 begun by the Board's questions.

13 MR. SINKIN: I would disagree, Mr. Chairman.
14 I think the line of inquiry is whether the witness
15 thinks that ALARA deficiencies are reportable under
16 50.55(e) and I think Mr. Reis is exploring another area
17 where they may indeed be reportable under 50.55(e).

18 MR. AXELRAD: The questioning of this witness
19 related to reportability and ALARA deficiencies as a
20 significant breakdown in the QA program and in that
21 connection the witness deferred to Appendix B. Appendix
22 B is what's referred to as 50.55(e)(1)(i) and that is
23 the matters to which this witness is qualified to
24 testify, to which he did testify. He did not testify
25 with respect to engineering deficiencies and how those

1 would or would not come under 50.55(e)(ii) or with
2 respect to whether they would come under Appendix A.
3 And I think we're going beyond the type of examination
4 that a QA manager was giving.

5 JUDGE BECHHOEFER: Mr. Reis?

6 MR. REIS: I think he is a QA manager and
7 that's just what I'm asking about, parts of the
8 regulations that involve quality assurance. And I don't
9 see any -- I don't see the dichotomy between "i" and --
10 "i" and "ii" under 50.55(e)(1).

11 MR. AXELRAD: (1)(i) specifically refers to
12 Appendix B.

13 MR. REIS: That's right. But there's also --

14 MR. SINKIN: Appendix A, it clearly says a
15 quality assurance program shall be established, et
16 cetera, et cetera. I also think the original question
17 asked was would a failure to properly review designs for
18 ALARA fall in a 50.55(e) category.

19 MR. REIS: Right.

20 JUDGE BECHHOEFER: We'll overrule this
21 objection and we'll see where the line goes. But we
22 will overrule this one.

23 Q (By Mr. Reis) Are you aware that criterion 1
24 may cover quality assurance areas that are not
25 encompassed under Appendix B? That is criterion 1 of

1 Appendix A to Part 50.

2 MR. AXELRAD: Mr. Chairman, I'll object to
3 that question on another basis. Applicability of
4 Appendix A and how it is to be read in conjunction with
5 Appendix B is a matter which has not been clearly
6 established under NRC precedent. There are some
7 questions as to what those requirements actually mean.
8 The Commission has specifically spoken on that matter
9 and has asked the Staff to take additional steps. I
10 really think to that extent the question is a legal
11 question.

12 MR. REIS: I'll agree that the Commission has
13 spoken, but I won't agree it said exactly what Mr.
14 Axelrad said. I think it said that there shall be
15 certain matters applied in the interim until the Staff
16 is fully examined.

17 MR. AXELRAD: To be applied on a case by case
18 basis depending upon the circumstances. Certainly there
19 is no clarity in those directions. And to ask a witness
20 to testify to that who has not been made familiar with
21 the various NRC decisions and the current requirements
22 and practices I don't believe is an appropriate
23 question.

24 JUDGE BECHHOEFER: I think the witness can
25 probably say he doesn't know or isn't familiar with it,

1 if that's the case. I think we'll overrule the
2 objection.

3 A Okay. I'm generally aware that there's a lot
4 of discussion been going on for sometime in the industry
5 concerning the phrase called "important to safety." I'm
6 not aware for our project that there has been any
7 decision or commitment made that takes our project
8 beyond the term safety-related as defined in the table
9 of equipment systems and structures that's in the safety
10 analysis report.

11 (No hiatus.)

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1 Q (By Mr. Reis) Okay. Going to another matter,
2 when Mr. Phillips and Mr. Herr asked you for the Quadrex
3 report, and I believe -- did you testify that they also
4 asked you at the same time for other documents?

5 A No, sir, I don't believe I testified.

6 Q They only asked for the Quadrex report at that
7 time?

8 A I think that's correct.

9 Q Did they ask for other documents as well at
10 that time?

11 A Not that I recall.

12 MR. REIS: That's all I have.

13 BOARD EXAMINATION

14 By Judge Bechhoefer:

15 Q One further question on this CCANP 123. Turn
16 to page seven, it's the one that has the word
17 "discussion" on it, about which you testified a few
18 minutes ago,

19 A Yes, sir.

20 Q How do you interpret the statement in the
21 summary paragraph which, if you delete certain of the
22 matters, I will read this deleting what I don't consider
23 important for the moment. It says "Due to the
24 significance of the deficiencies identified in the areas
25 of ALARA review," and then I skip some, "the B&R

1 engineering program needs strengthening to assure quality
2 requirements are not violated." How do you construe
3 those words "quality requirements," as applied to the
4 area of ALARA review which was referred to in the same
5 sentence?

6 A From my knowledge of quality assurance audits
7 in general and this in particular, it was customary that
8 the auditors, when they would write a report, would use
9 the term "quality requirements" to mean any matter that
10 was contained in a procedure, any procedure or
11 requirement regardless of its significance; if the
12 procedure contained a requirement and the people who are
13 performing the work activities failed to meet that
14 requirement, then that was judged by the auditors to mean
15 that they had not met the quality requirement because it
16 was on -- for that basis that the procedures were
17 established.

18 Q So then that reference to quality requirements
19 might or might not have re referred to Appendix B
20 requirements?

21 A That's correct. We generally view that the
22 control of activities on the project is done principally
23 through the mechanism of procedures. And it's through
24 the implementation of those procedures that the requisite
25 level of quality is achieved for any given activity. And

1 to that extent, we interpret that word to mean a general
2 conformance with procedural requirements.

3 JUDGE BECHHOEFER: Okay, thank you. That's all
4 the Board has. Mr. Axelrad, anything further?

5 MR. AXELRAD: No, Mr. Chairman.

6 MR. SINKIN: No, Mr. Chairman.

7 JUDGE BECHHOEFER: Any follow up on my last
8 question?

9 MR. SINKIN: No.

10 JUDGE BECHHOEFER: With nothing further, I
11 guess you're excused. Thank you for coming.

12 JUDGE BECHHOEFER: We want to take a very brief
13 break; I want Mr. Sinkin to come up here. I want to ask
14 him something.

15 (Recess.)

16 JUDGE BECHHOEFER: Before we go on to the next
17 witness, we wish to bring up a matter that Mr. Sinkin has
18 raised. Mr. Sinkin has requested and we are going to
19 grant a subpoena for Mr. Knox Broom of Brown & Root, to
20 appear at 9:00 a.m. on Thursday, August 8th, to testify
21 on behalf of CCANP; the purpose of this testimony as
22 described to us will be to introduce, to at least
23 authenticate and I guess ask questions about, CCANP
24 Exhibit 121. That was the sole reason provided for the
25 subpoena in question. We will issue that. I believe Mr.

1 Broom can move to quash if he desires.

2 MR. REIS: Well, the staff and -- well, it
3 would take a motion to quash at this point to do it and I
4 guess it's only appropriate for Brown & Root to do it.

5 MR. AXELRAD: Well, I don't agree with the
6 statement Mr. Reis just made. I believe that anyone
7 could file a motion to quash and we may in fact want to
8 do that. But obviously at this particular point, the
9 Board has informed us that the Board is going to sign
10 that. Whatever reasons we may have for believing that
11 action is not appropriate for the Board, we will bring to
12 the Board's attention and let the Board rule.

13 JUDGE BECHHOEFER: Yes, we might say we do
14 think the statement which we have received satisfies the
15 general relevance criteria for issuing the subpoena. And
16 it is solely for the purpose, in terms of the time Mr.
17 Broom's testimony would take, it is solely for the
18 purpose of -- well, authenticating and I guess testifying
19 about, I'm not clear, Exhibit 121.

20 MR. REIS: The staff would just question
21 materiality as to that and --

22 MR. AXELRAD: Well, I don't believe that we
23 need to go into the various arguments at this particular
24 point. I would also point out that Mr. Sinkin was
25 supposed to identify all witnesses he wanted to subpoena

1 back on June 26th and he had that document at that point.
2 I don't want to get into that arguments at this point but
3 what I'm trying to say is that there may be any number of
4 reasons why the subpoena should not have been issued or
5 should be quashed if it has been issued. We will ponder
6 these matters and bring them to the attention of the
7 Boards.

8 JUDGE BECHHOEFER: I read our rules that we
9 have a showing of general relevance, at least, we must
10 issue it subject to motions to quash.

11 MR. AXELRAD: Right.

12 JUDGE BECHHOEFER: And I guess I have
13 determined that rule previously as well. I wanted to
14 inform the parties, so they would be aware.

15 MR. AXELRAD: Fine. Thank you, Mr. Chairman.
16 Before we call our next witness, I would -- I do have one
17 preliminary matter.

18 We, HL&P, did receive last week from INPO
19 the construction evaluation report covering the
20 evaluation that INPO had performed earlier in 1985.
21 We have obtained copies; the report was made available,
22 or the staff was informed last week that the report was
23 available for its review, but we have obtained copies for
24 the information of the Board and the parties and I will
25 give these out at this point.

1 Mr. Chairman, at this point,
2 Applicants will call Mr. Wisenburg and Mr. Gutterman will
3 present this witness.

4 MR. GUTTERMAN: Mr. Wisenburg has not been
5 previousl sworn, Mr. Chairman.

6 Whereupon,

7 MARK R. WISENBURG
8 was called as a witness by the Applicants and, having
9 been duly sworn, was examined and testified as follows:

10 DIRECT EXAMINATION

11 By Mr. Gutterman:

12 Q Would you please state your full name for the
13 record?

14 A Mark R. Wisenburg.

15 Q Mr. Wisenburg, do you have in front of you a
16 document entitled Testimony on Behalf of Houston Lighting
17 & Power Company, et al, of Mark R. Wisenburg?

18 A Yes, I do.

19 Q And does it consist of 19 typed pages?

20 A Yes, it does.

21 Q Are there any corrections -- well, are you
22 familiar with the contents of it?

23 A Yes, I am.

24 Q Are there any corrections that need to be made
25 to it?

1 A Yes, I'd like to make a few.

2 JUDGE BECHHOEFER: Hold the line. I'm still
3 trying to find my copy.

4 MR. GUTTERMAN: I have an extra copy here, Mr.
5 Chairman, if you need it.

6 JUDGE BECHHOEFER: I had it sitting here a
7 minute ago. I was hoping to use the marked copy that I
8 had. Okay.

9 I just prefer to mark up the
10 one I've already got some marks on.

11 A I did have a correction to answer 6 which
12 begins on page 4, and carries over to Page 5. The
13 correction would begin on line 26 of Page 4, with a
14 deletion of the word "significance."

15 And then turning to page 5, insert the phrase,
16 "which may be significant, "following the word
17 "identified."

18 Then continuing on in line 2, delete the words
19 "regardless of whether," and substitute in there
20 instead the word "if," such that the entire sentence
21 would then read, "A similar process is in place for
22 Bechtel employees which provides for the initiation of a
23 deficiency evaluation report whenever a deficiency is
24 identified which may be significant and notification of
25 HL&P if Bechtel's evaluation finds that such a

1 deficiency exists."

2 Q Is that the only correction?

3 A That's the only correction, sir.

4 Q With that correction, is the testimony, the
5 document entitled Testimony on Behalf of Houston Lighting
6 & Power Company, et al, of Mark R. Wisenburg, true and
7 correct to the best of your knowledge?

8 A Yes, it is.

9 MR. GUTTERMAN: I move that the Testimony on
10 Behalf of Houston Lighting & Power Company, et al, of
11 Mark R. Wisenburg be admitted into evidence and bound
12 into the record as if read.

13 MR. SINKIN: No objection.

14 MR. REIS: No objection.

15 Q (By Mr. Gutterman) Mr. Wisenburg --

16 JUDGE BECHHOEFER: Do you want me to rule?

17 MR. GUTTERMAN: I'm sorry, Mr. Chairman, you
18 are absolutely right.

19 JUDGE BECHHOEFER: Mr. Wisenburg's testimony
20 will be accepted into evidence and bound into the record
21 as if read.

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1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

4 In the Matter of)
5 HOUSTON LIGHTING & POWER) Docket Nos. STN 50-498 OL
6 COMPANY, ET AL.) STN 50-499 OL
7 (South Texas Project, Units 1)
8 and 2))

9 TESTIMONY ON BEHALF OF HOUSTON LIGHTING & POWER COMPANY,
10 ET AL.,
11 OF MARK R. WISENBURG

12 Q.1 Mr. Wisenburg, please state your full name and current
13 position.

14 A.1 My name is Mark R. Wisenburg and I am currently
15 Manager, Nuclear Licensing for Houston Lighting & Power
16 Company (HL&P).

17
18 Q.2 Please describe your educational background and
19 professional experience.

20 A.2 I received my B.S. degree from the United States Naval
21 Academy in 1964 and completed the United States Naval
22 Nuclear Propulsion Training Program in 1965. After
23 serving eleven years in the United States Navy on
24 active nuclear submarine duty, including one year as
25 Executive Assistant to the Deputy Chief of Naval
26 Operations (Submarine Warfare), I joined the Tennessee
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1 Valley Authority (TVA) as Principal Licensing Engineer
2 for the Browns Ferry Nuclear Plant in 1975. I served
3 in that capacity until 1976 when I was promoted to
4 Supervisor, PWR Projects Section, Regulatory Staff,
5 responsible for licensing activities for the Sequoyah,
6 Watts Bar, Bellefonte and Yellow Creek Nuclear Plants.
7 I became Staff Nuclear Engineer in 1979, and acted as
8 assistant licensing manager for TVA from that time
9 until 1982. In May 1982, I joined HL&P as Special
10 Assistant to the Manager, Nuclear Licensing and was
11 promoted to my current position in September, 1982.

12
13 Q.3 During your professional career what involvement have
14 you had with 10 C.F.R. § 50.55(e)?

15 A.3 I have had considerable experience with the
16 requirements of that regulation. Throughout my
17 employment at TVA, I was involved in evaluating
18 numerous matters for reportability, and prepared or
19 supervised the preparation of written reports required
20 by 10 C.F.R. § 50.55(e) for the Yellow Creek,
21 Bellefonte, Watts Bar and Sequoyah nuclear plants.

22 In my current position, I review all reportability
23 determinations under 10 C.F.R. § 50.55(e) by the South
24 Texas Project (STP) Incident Review Committee (IRC) and
25 often participate in the technical reviews of
26 individual matters. I prepared Revision 1 of the

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1 current HL&P reporting procedure which, among other
2 things, established the Deficiency Evaluation Form
3 (DEF), and supervised the preparation of subsequent
4 revisions. I have also participated in the training of
5 HL&P Engineering and Quality Assurance (QA) personnel
6 in the applicable procedures and regulatory
7 requirements.

8

9 Q.4 What is the purpose of your testimony?

10 A.4 The purpose of my testimony is to describe HL&P's
11 current program for the evaluation and reporting of
12 deficiencies pursuant to 10 C.F.R. § 50.55(e), changes
13 in that program since 1981, and, in particular, the
14 method by which conditions are evaluated in order to
15 determine whether they represent significant breakdowns
16 in the STP QA program which may be reportable under 10
17 C.F.R. § 50.55(e)(1)(i).

18

19 Q.5 What is the current STP procedure governing the conduct
20 of reportability reviews under 10 C.F.R. § 50.55(e)?

21 A.5 Project Licensing Procedure (PLP)-02, originally issued
22 on May 18, 1982 and updated through Revision 5 on May
23 21, 1985, specifies the process by which HL&P
24 identifies and evaluates conditions which may be
25 reportable pursuant to 10 C.F.R. § 50.55(e). PLP-02

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1 also governs the review for reportability of conditions
2 under 10 C.F.R. Part 21. Applicants' Exhibit 66 is a
3 copy of the current procedure. While HL&P is
4 responsible for evaluating and reporting conditions
5 pursuant to 10 C.F.R. § 50.55(e), procedures are also
6 in place defining the responsibility of Bechtel Energy
7 Corporation (Bechtel), Ebasco Services Inc., and Ebasco
8 Constructors Inc., (Ebasco) under the regulation.
9

10 Q.6 How are conditions which need to be evaluated for
11 reportability under 10 C.F.R. § 50.55(e) identified at
12 STP?

13 A.6 Any HL&P employee becoming aware of a condition which
14 he believes may constitute a significant deficiency is
15 required to promptly prepare a DEF describing the
16 condition. Once the DEF is prepared, it is evaluated
17 by HL&P Engineering. If Engineering determines that a
18 significant deficiency exists, the DEF is promptly
19 provided to the IRC for evaluation for reportability
20 under 10 C.F.R. § 50.55(e). If HL&P Engineering
21 determines that no significant deficiency exists, the
22 basis for that determination is documented and the DEF
23 is, nevertheless, transmitted to the IRC Chairman.

24 A similar process is in place for Bechtel employees
25 which provides for the initiation of a Deficiency
26 Evaluation Report (DER) whenever a significant
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1 deficiency is identified, and notification of HL&P,
2 regardless of whether Bechtel's evaluation finds that
3 such a deficiency exists. Finally, Ebasco employees
4 are responsible for bringing conditions which may
5 represent significant deficiencies to Bechtel's
6 attention and Bechtel, as appropriate, may generate a
7 DER.

8 Whether or not a particular condition is determined
9 to be a significant deficiency within the meaning of 10
10 C.F.R. § 50.55(e), deficient conditions are, of course,
11 dispositioned and corrected using appropriate Project
12 procedures.

13 Q.7 Who serves on the IRC?

14 A.7 The IRC is chaired by Mr. Michael Powell, P.E., HL&P's
15 Supervising Engineer-STP Licensing. Mr. Paul W.
16 Ratter, HL&P's Project QA Supervisor, also sits on the
17 Committee. In addition, the IRC includes an
18 Engineering representative cognizant in the discipline
19 affected by the particular condition being evaluated,
20 and other individuals, designated by the IRC Chairman
21 on a case-by-case basis, who are familiar with the
22 matters to be evaluated. Both the Chairman and the
23 Project QA Supervisor may designate others to sit on
24 the Committee in their stead when they are not
25 available during the 24 hour period within which the
26 IRC must make its determination and notify the NRC.

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1 Q.8 May HL&P executive management also convene a committee
2 to evaluate an item for reportability?

3 A.8 Yes. The Group Vice President - Nuclear may also
4 convene a committee to perform an evaluation under 10
5 C.F.R. § 50.55(e).
6

7 Q.9 Please describe Mr. Powell's background and
8 qualifications?

9 A.9 Mr. Powell has a Bachelor of Engineering in Electrical
10 Engineering from the State University of New York at
11 Stony Brook, and a M.S. in Nuclear Engineering from
12 Georgia Institute of Technology. He was employed by
13 Sargent & Lundy Engineers as an engineer in the Nuclear
14 Safety and Licensing Division from 1978 until 1979, and
15 joined HL&P in 1980 as an Associate Engineer in the
16 Nuclear Safety and Licensing Section. He was promoted
17 to Engineer and Team Leader of the STP licensing group
18 in that same year. Mr. Powell was promoted to Lead
19 Engineer, Licensing for STP in 1981 and to his current
20 position in 1984. In that capacity, he is responsible
21 for planning and directing the work of the STP
22 licensing section. Mr. Powell has served as IRC
23 Chairman since 1980. He is a Registered Professional
24 Engineer in Texas and a Member of the American Nuclear
25 Society, the Institute of Electrical and Electronics
26 Engineers, and the Health Physics Society.
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1 Q.10 Please describe Mr. Ratter's background and
2 qualifications.

3 A.10 Mr. Ratter has 14 years of commercial nuclear QA/QC
4 experience, including work for J.A. Jones Construction
5 Company/Livsey Company, United Engineers and
6 Constructors, Bechtel Power Corporation, and
7 Gilbert/Commonwealth Associates. He joined HL&P in
8 1979 as a Lead QA Specialist - Audits, and was promoted
9 to Supervisor, Technical Services and Vendor
10 Surveillance in 1981. He was appointed to his present
11 position in March 1984, in which he is responsible for
12 the supervision of audits and surveillance, and quality
13 program development for design and procurement activi-
14 ties. From March, 1982 until September, 1982, Mr.
15 Ratter was on loan to the Institute of Nuclear Power
16 Operations (INPO) as a utility representative partici-
17 pating in the development of INPO's Performance
18 Objectives and Criteria for Construction Project
19 Evaluations. Mr. Ratter has obtained certificates as
20 an ANSI Level III Inspector in Procurement, a Lead
21 Auditor, a Quality Specialist - Mechanical and as a
22 Level II Inspector for a number of non-destructive
23 examination techniques.

24
25 Q.11 Once the IRC is notified of a significant deficiency is
26 an IRC meeting initiated?

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1 A.11 Yes. The IRC is required to conduct an initial
2 evaluation to determine whether or not the condition is
3 reportable or potentially reportable pursuant to 10
4 C.F.R. § 50.55(e), and if so, to report it to the NRC
5 within 24 hours of such notification. The IRC Chairman
6 is responsible for promptly notifying Mr. Goldberg,
7 HL&P's Group Vice President-Nuclear, myself and the
8 NRC.

9

10 Q.12 Once the NRC is notified of a reportable or potentially
11 reportable condition, what does the IRC do?

12 A.12 The Chairman will initiate a technical evaluation in
13 order to confirm the determination as to the
14 reportability of the condition. That technical
15 evaluation is performed by a group with the expertise
16 to perform the evaluation, designated on a case by case
17 basis by the Chairman. During both the initial and
18 technical evaluations, the IRC Chairman completes an
19 IRC evaluation checklist, documenting its determi-
20 nations with respect to the specific criteria of 10
21 C.F.R. § 50.55(e).

22

23 Q.13 What happens if the technical evaluation confirms that
24 the condition is reportable?

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1 A.13 A written report is prepared, to be forwarded to the
2 NRC within 30 days of the initial notification to the
3 NRC. It contains all of the information required by 10
4 C.F.R. § 50.55(e), including a description of the
5 deficiency, an analysis of the safety implications and
6 the corrective actions taken, and sufficient
7 information to permit analysis and evaluation of the
8 deficiency and the corrective action by the NRC. I am
9 responsible for reviewing the IRC's completed
10 evaluations and the written reports prior to their sub-
11 mission to the NRC, and Mr. Goldberg reviews and signs
12 the written reports to the NRC.

13

14 Q.14 What happens if the technical evaluation discloses that
15 the condition is not reportable?

16 A.14 The finding of non-reportability is confirmed by the
17 IRC. The determination of the IRC, including the
18 justification for concluding that the condition is not
19 reportable, is documented and the NRC is verbally
20 notified within 30 days. A written report is
21 subsequently prepared informing the NRC of the results
22 of the evaluation.

23

24 Q.15 What happens if the technical evaluation cannot be
25 completed within the 30 days required for submission of
26 the written report to the NRC?

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1 A.15 The condition is considered to be reportable and an
2 interim report is prepared for submission to the NRC.
3

4 Q.16 Is there any mechanism to verify that those matters
5 which were determined not to require IRC review, do
6 not, in fact, represent reportable deficiencies?

7 A.16 Yes. As indicated above, all DEFs are forwarded to the
8 IRC Chairman, regardless of whether IRC review is
9 recommended. Periodically, the Chairman convenes the
10 IRC to review those DEFs previously determined not to
11 warrant IRC review in order to provide additional
12 assurance that all significant items have been
13 adequately considered for reportability. Additionally,
14 Bechtel DERs determined not to identify significant
15 deficiencies are informally reviewed by HL&P Licensing
16 and Engineering.
17

18 Q.17 How does HL&P's current procedure for evaluating
19 conditions for reportability compare to the procedure
20 in effect on May 8, 1981?

21 A.17 Although in May, 1981, there was no requirement for the
22 preparation of a DEF, both procedures require any
23 individual becoming aware of a condition which may
24 require evaluation for reportability to promptly bring
25 that information to the attention of appropriate
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1 supervisory personnel who initiate the IRC review
2 process as appropriate. Both procedures provide for an
3 IRC determination to be made when it is informed of a
4 matter that may be reportable. IRC review, and initial
5 and written notifications to the NRC must be performed
6 in accordance with the time limits provided in 10
7 C.F.R. § 50.55(e). Differences include the designated
8 individuals responsible for reviews, and a provision in
9 the former procedure for notification of the Resident
10 Reactor Inspector (RRI), in addition to the Region IV
11 office. HL&P, however, continues to keep the RRI
12 informed regarding reportable items.

13

14 Q.18 Were there any significant modifications of the
15 applicable reporting procedure between May 8, 1981 and
16 May 21, 1985, when the current revision of the
17 procedure was issued?

18 A.18 Yes. PLP-02 Revision 1 enhanced the evaluation process
19 by, among other things, adding the requirement for the
20 preparation of a DEF, clarifying the responsibility of
21 individuals identifying conditions warranting
22 evaluation, providing for periodic IRC review of all
23 DEFs, adding the requirement that IRC evaluation
24 checklists be completed and providing for the
25 concurrence of the Manager, Nuclear Licensing in all
26 reportability determinations.

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1 Q.19 Did the procedure in effect in May, 1981 provide a
2 satisfactory mechanism for identifying and reporting
3 deficiencies pursuant to 10 C.F.R. § 50.55(e)?

4 A.19 Yes. The procedure required individuals identifying
5 conditions warranting review for reportability to
6 promptly call such matters to the attention of
7 management, and placed responsibility on appropriate
8 personnel to make a determination of reportability in a
9 time frame consistent with the requirements of 10
10 C.F.R. § 50.55(e).

11

12 Q.20 In reviewing DEFs and DERs, does the IRC routinely
13 determine whether conditions represent a significant
14 breakdown in the STP QA program which may be reportable
15 under 10 C.F.R. § 50.55(e)(1)(i)?

16 A.20 Yes. The evaluation checklist used by the IRC requires
17 that it determine whether matters before it may
18 represent a significant breakdown in the STP QA
19 program, pursuant to 10 C.F.R. § 50.55(e)(1)(i),
20 regardless of whether the other criteria for
21 reportability have been satisfied. Thus, all
22 conditions presented for IRC review are evaluated in
23 light of their implications on the STP QA program, even
24 if no deficiency in design or construction has been
25 found.

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1 Q.21 How is the evaluation under 10 C.F.R. § 50.55(e)(1)(i)
2 performed?

3 A.21 It is important to recognize that there are no
4 objective standards for determining whether a specific
5 condition represents a significant QA breakdown. The
6 determination that a particular matter represents such
7 a breakdown is a subjective determination that must be
8 made on the basis of sound judgment by knowledgeable
9 persons.

10 It is difficult, if not impossible, to provide a
11 hard and fast rule as to what represents a significant
12 breakdown of the QA program. While the mere existence
13 of a deviation from the QA program (such as an
14 inadequate, incomplete or erroneous inspection record)
15 may not rise to the level of a significant QA
16 breakdown, the nature, extent and ramifications of the
17 specific condition being evaluated must be considered.

18
19 Q.22 Please provide an example of how the current 10 C.F.R.
20 § 50.55(e) reporting procedure has been applied under
21 circumstances in which a condition with QA implications
22 has been evaluated by the IRC.

23 A.22 The Atomic Safety and Licensing Board, in its May 17,
24 1985 Sixth Prehearing Conference Order at 8, has
25 identified an item related to NRC I&E Unresolved Item
26 83-12-01 which can serve as an example.

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1 Q.23 What was the nature of the condition which was
2 evaluated for reportability?

3 A.23 The condition which was evaluated was identified in two
4 HL&P audits of Bechtel Engineering, and was documented
5 in two HL&P Corrective Action Reports (CAR) issued
6 against Bechtel, in October 1982 and June 1983, for the
7 omission of references to specific QA standards
8 (certain ANSI and other industry standards) in three
9 procurement specifications.

10

11 Q.24 Please describe, more specifically, the conditions
12 addressed in the two CARs.

13 A.24 CAR G-165, issued in October, 1982, indicated, among
14 other things, that HL&P QA's review of two procurement
15 specifications during an audit found that "seemingly
16 applicable" ANSI N45.2 daughter standards had not been
17 invoked in the specifications, and that Bechtel's
18 technical and QA reviews for quality content had not
19 identified the apparent deficiencies. The second CAR,
20 G-278, was issued in June, 1983 and indicated, among
21 other things, that, apparently contrary to Project
22 requirements, certain industry standards had not been
23 referenced in a procurement specification. It also
24 indicated that Bechtel QA's review of the specification
25 had not identified the absence of the standards.

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1 Q.25 How was this matter brought to the attention of the
2 IRC?

3 A.25 When the NRC Inspector, during the course of Inspection
4 83-12, noted that the apparent omission of the QA
5 standards in the procurement specifications may have
6 been indicative of a reportable breakdown in the STP QA
7 program, HL&P's Project QA Manager prepared a DEF
8 citing the results of the two HL&P audits which had
9 identified the omission of the QA standards. After the
10 DEF was reviewed by HL&P Engineering, it was forwarded
11 to the IRC for review.

12 Q.26 Did the IRC conclude that the matter represented a
13 significant breakdown in the STP QA program?

14 A.26 No. The IRC determined that the two CARs did not
15 represent a significant breakdown in the STP QA program
16 and did not meet the criteria for reportability of 10
17 C.F.R. § 50.55(e).

18
19 Q.27 Please describe how the IRC determined that the
20 condition did not represent a significant QA breakdown.

21 A.27 After consultation with the appropriate Bechtel
22 Engineering and QA personnel in order to review
23 Bechtel's actions in response to the CARs, the IRC
24 determined that, in both cases, Bechtel had, in fact,
25 evaluated the specifications in question in order to
26 determine which QA standards ought to be imposed on the

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1 vendors. Although HL&P's standard practice was
2 somewhat different than Bechtel's practice and would
3 have resulted in the selection of a somewhat different
4 set of standards, Bechtel had followed its NRC approved
5 QA program, and the IRC determined that there had been
6 no QA breakdown.

7
8 Q.28 What action was taken in response to the CARs?

9 A.28 After discussion between Bechtel Engineering and HL&P
10 QA, it was determined that the appropriate QA standards
11 had, in fact, been referenced in the specifications.
12 However, because the scope of work under one of the
13 specifications had subsequently changed, that
14 specification was modified to reference the additional,
15 applicable standards.

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18 Q.29 While a specific condition may be determined not to
19 represent a significant QA breakdown, is there any
20 effort to determine whether a number of such
21 conditions, taken together, represent such a breakdown?

22 A.29 Yes. HL&P's trending program provides for the review
23 of all deficiency documents generated on the Project
24 (including all DEFs and DERs) against the criteria of
25 10 C.F.R. § 50.55(e), in order to determine if a number
26 of such conditions, taken together, may be reportable.

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1 Under that program, all deficiency documents generated
2 by HL&P, Bechtel and Ebasco are collected, coded and
3 analyzed in order to determine whether any of the
4 conditions reported in such documents, taken together,
5 constitute a trend. Whenever a trend is identified,
6 the condition is evaluated for reportability pursuant
7 to 10 C.F.R. § 50.55(e) by HL&P QA. If there appears
8 to be a reportable condition, a DEF is initiated and
9 transmitted to the IRC for evaluation.

10 In order to determine if a trend exists, deficiency
11 documents are coded by company, organization,
12 discipline or group, activity (such as soils, receiving
13 or Cadwelding) and deficiency type (such as drafting
14 deficiencies, fabrication errors or interferences).
15 Deficiencies are normalized against criteria such as
16 manhours, quantity installed and hours of inspection,
17 and analyzed to determine if any immediate corrective
18 action or further review is warranted.

19 A summary of new trends identified and actions
20 taken on previously identified trends is included in
21 monthly reports and a formal, detailed Trend Report is
22 prepared quarterly and distributed to, among others,
23 the Group Vice President-Nuclear, QA Manager, Project
24 QA Manager, Bechtel Project QA Manager and Ebasco
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1 Quality Program Site Manager. Quarterly Trend Reports
2 and other documentation of trends are maintained and
3 controlled as formal QA records.

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5 Q.30 Does HL&P's current program provide a satisfactory
6 mechanism for the identification and reporting of
7 deficiencies under 10 C.F.R. § 50.55(e) and, in
8 particular, for the identification and reporting of
9 reportable QA deficiencies under 10 C.F.R.
10 § 50.55(e)(1)(i)?

11 A.30 The program in effect at STP requires that Project
12 employees promptly call matters warranting review for
13 reportability to the attention of appropriate
14 management personnel, provides for prompt evaluation by
15 appropriate individuals of conditions which may be
16 reportable, and includes a mechanism to assure that
17 matters determined not to require IRC review have
18 received adequate consideration. In each case in which
19 the IRC evaluates a condition for reportability, a
20 determination is made as to whether the condition may
21 represent a significant QA breakdown, regardless of
22 whether the other criteria for reportability have been
23 satisfied. Finally, HL&P's trending program provides
24 additional assurance that conditions which may be
25 insignificant standing alone, but which, taken
26 together, may represent a significant QA breakdown, are

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evaluated for reportability. Accordingly, HL&P's current reporting program is more than satisfactory and provides assurance that HL&P will continue to meet its obligations under 10 C.F.R. § 50.55(e).

1 JUDGE BECHHOEFER: I have one question. Did
2 you, at this point, include in that what's attached as
3 Applicants' Exhibit 66 or are you going to do that
4 separately?

5 MR. GUTTERMAN: I was just going to do that
6 separately, that's what I was rushing ahead
7 to.

8 JUDGE BECHHOEFER: Okay.

9 Q (By Mr. Gutterman) Mr. Wisenburg, do you have
10 a document entitled "Houston Lighting & Power Company
11 South Texas Project Procedure Manual, Summary of
12 Revisions." I guess that's the first page of the
13 procedure, entitled PLP-02, reporting design and
14 construction deficiencies to NRC?

15 A Okay, I have a document entitled "Reporting of
16 Design and Construction Deficiencies to NRC." This is a
17 project licensing procedure, designated with the number
18 PLP-02, revision 5, dated May 21st, 1985.

19 Q And does that consist of 24 pages plus an
20 attached summary of revisions in the front of it?

21 A Yes, it does.

22 Q And is that document, the document that's
23 identified as Applicants' Exhibit 66 at answer 5 or pages
24 3 and 4 of your testimony?

25 A Yes, it is, sir.

1 MR. GUTTERMAN: I move that Applicants' Exhibit 66 be
2 admitted into evidence.

3 MR. SINKIN: No objection.

4 MR. REIS: No objection.

5 JUDGE BECHHOEFER: Applicants' Exhibit 66 will
6 be admitted.

7 (Applicants' Exhibit No. 66 was marked
8 for identification and received into
9 evidence.)

10 MR. GUTTERMAN: And that completes Applicants'
11 direct examination of Mr. Wisenburg.

12 JUDGE BECHHOEFER: Mr. Sinkin?

13 CROSS-EXAMINATION

14 By Mr. Sinkin:

15 Q Mr. Wisenburg, in the sentence that you
16 corrected on page 4 and 5, you talk about notification of
17 HL&P. My question is: Who at HL&P is notified?

18 A The identification to HL&P is by means of a
19 hand carried copy of a completed Bechtel deficiency
20 evaluation report, placed into the hands of the chairman
21 of the IRC, if he is unavailable placed in my hands; if I
22 am unavailable, then placed in the hands of another
23 member of the licensing department.

24 Q From that sentence on page 4 and 5, would it be
25 correct to say that the only way that a DEF would stop at

1 Bechtel is if Bechtel personnel determined that there was
2 not a deficiency --

3 MR. GUTTERMAN: That's a DER.

4 MR. SINKIN: A DER.

5 Q (By Mr. Sinkin) In other words, Bechtel
6 asking some determination about it not being potentially
7 a notifiable finding, would not stop it at Bechtel, it
8 would still have to go on but Bechtel finding that it
9 wasn't in fact a deficiency, would stop it at Bechtel and
10 it would go no further. Is that how I read your sentence
11 4 and 5?

12 A That's not what happens, no.

13 Q Okay.

14 A Sentence 4 and 5 is meant to describe that
15 process which is proceduralized by the formal Bechtel
16 project procedure, which would require that a deficiency
17 which had been evaluated by the Bechtel engineering
18 organization and found to be significant, that deficiency
19 along with the Bechtel recommendation of either
20 reportability -- whether it would be reportable or
21 potentially reportable, would be documented on that DER
22 and then that DER would be delivered to HL&P.

23 In the case that they reached the alternate
24 conclusion, that is that the deficiency described in the
25 DER did not, in their opinion, merit further

1 consideration for reportability, they forward those
2 documents informally, that is, out of the procedure; it's
3 not a requirement of the procedure, but one which I
4 insisted on, to me for my overview. And I forward those
5 documents on to Mr. Powell and to to our engineering
6 department for further consideration.

7 Q Maybe I'm just having trouble with the way the
8 sentence ended up after the changes. Let me try and
9 follow it through. Someone at Bechtel identifies what
10 they think is a deficiency. Then according to what you
11 say, they would initiate a deficiency evaluation report,
12 whether or not there had been a determination that the
13 deficiency was significant at this point. They just
14 write it up?

15 A Yes, sir.

16 Q Then there would be notification to HL&P of
17 that deficiency and you have the Bechtel's evaluation, if
18 I understand that such a deficiency exists.

19 A Such a deficiency exists there implies that the
20 deficiency had in fact be determined to be significant,
21 following an engineering evaluation by the Bechtel
22 organization.

23 Q So the significance is the next step?

24 A Yes, sir.

25 Q Okay. In your testimony at page 6, line 1,

1 line 3, the group vice-president nuclear that you
2 referred to would today be Mr. Goldberg?

3 A Yes, sir.

4 Q If Mr. Goldberg were to convene such a
5 committee as you identify in answer 8, would the results
6 of their review be forwarded to the IRC whether or not
7 the item reviewed was found to be potentially reportable?

8 A Yes, it would be. I would expect that any such
9 committee which would be convened in the future would
10 include either myself or Mr. Powell as a member. And the
11 presence of myself or Mr. Powell would be to ensure that
12 any records of that evaluation were produced such that we
13 would have objective evidence of the evaluation and the
14 results of that he evaluation. That would then be placed
15 in the IRC file in any case.

16 Q Does the procedure by which the group
17 vice-president nuclear would convene such a committee
18 require the presence of you or Mr. Powell?

19 A There is no written procedure by -- to include
20 the criteria by which such a committee would be
21 constituted.

22 Q Would the procedure require that, if a
23 committee of HL&P personnel other than the IRC were
24 formed to review an item for potential reportability,
25 that their determinations would go to the IRC whether or

1 not they found the item to be potentially reportable?

2 A The fact that such a committee could be formed
3 in the first place is an element of PLP-02, the procedure
4 which governs the evaluation of reportability.
5 And as such, the records, the documentation
6 requirements of PLP-02 would remain in force.

7 Q Can you correct me to the parts of PLP-02, that
8 would govern such a meeting, such a committee being
9 convened?

10 I do see a reference in 4-3-4 to the group
11 vice-president nuclear; I don't know if that's where it
12 comes from or --

13 A Thank you for pointing that out to me. That is
14 the particular section of the procedure which provides
15 for the executive group vice-president or the group
16 vice-president in this case, appointing a committee which
17 would be different than the normal IRC members for some
18 special reason.

19 Q So this sentence says unless an incident review
20 is conducted by a committee under the direction and
21 supervision of the group vice-president nuclear, at a
22 minimum the IRC shall consist of the following members.
23 And then you list who that would be.

24 A Yes.

25 Q Does that mean that if there is a review

1 conducted by a committee under the direction and
2 supervision of the group vice-president, there are no
3 minimum requirements as to who the members shall be?

4 A Statement means two things. One, that
5 committee would function as the IRC. And two, if that
6 committee does not constitute the IRC and we are
7 conducting our business as per the normal practice in
8 accordance with the procedure, that the membership of the
9 IRC will be as listed below: The project licensing
10 engineer as chairman, the project QA supervisor and the
11 cognizant supervising engineer from the project
12 engineering team.

13 Q As I read that, then, the group vice-president
14 nuclear has a carte blanche to pick a committee of his
15 choosing, conduct the meeting as if they were the IRC,
16 perform the functions of the IRC, and not be subject to
17 the review of the IRC. Is that correct?

18 A That committee would function as the IRC, sir.

19 Q But not be subject to the he view of the IRC as
20 it's composed -- I mean of course at this moment, if I
21 say, "Who are the members of the IRC," can you tell me?

22 A Yes.

23 Q Okay. Who are the members of the IRC today?

24 A The IRC, if I had a deficiency that would be
25 evaluated this afternoon would be Mr. Michael Powell, Mr.

1 Paul Rader and the cognizant engineering representative
2 from that discipline who could be one of four or five
3 people.

4 Q Depending on where the deficiency came from?

5 A Okay.

6 Q That's the IRC this afternoon. What I'm saying
7 is, as I read 4.3.4, this afternoon the group
8 vice-president nuclear could set up a committee composed
9 of people other than those people, review an item for
10 potential reportability, make a determination it was not
11 reportable, and the IRC that we just discussed would not
12 review that determination under this procedure. Is that
13 correct?

14 A As a matter of fact, Mr. Sinkin, that's not
15 correct.

16 Q Okay, why is that not correct?

17 A This procedure also provides -- excuse me, sir,
18 I'm mistaken.

19 Q You said the committee would operate?

20 A I misspoke. When this committee functions as
21 the IRC, they perform all the required actions of the
22 IRC, their qualifications would be as determined by Mr.
23 Goldberg. Their findings would be considered final.

24 Q So that exactly the situation that was created
25 on May the 8th, 1981 for the review of the Quadrex report

1 could be created again under 4.3.4?

2 A If there was a special circumstance which
3 required a committee to be composed of people with more
4 specialized knowledge or experience than the standing
5 IRC, yes, sir.

6 Q On page 11, at line 2, the sentence starts on
7 page 10, my question: What does two term "as appropriate"
8 mean at the end of that sentence.

9 A Okay. That particular "as appropriate" I was
10 confused as to which one you're talking about, the bottom
11 of page 10.

12 Q Yes. At the end of the paragraph.

13 A That particular "as appropriate" refers to how
14 the IRC review process at that time would have been
15 initiated. The procedure in effect allowed or provided
16 for matters to be brought to the attention of the quality
17 assurance manager, project quality assurance manager at
18 the site, and it also provided for matters to be brought
19 to the attention of supervisory personnel in the
20 engineering offices at that time.

21 What I'm trying to describe with that "as
22 appropriate," is to cover the contingency of one or the
23 other parties being initially informed.

24 Q Well, actually you may have answered to the
25 other "as appropriate." There is one " as appropriate" that

1 modified the supervisory personnel, and I think that's
2 what you may have just answered to.

3 There's another "appropriate" that says who
4 initiate the IRC review process as appropriate, that's
5 the one I was asking about, what does that mean, initiate
6 the IRC pro --

7 A I understand. And I'm sorry that the two "as
8 appropriates" in the same sentence may be causing some
9 confusion.

10 The last "as appropriate" refers to the actions
11 which would be taken by either the team leader nuclear
12 licensing in the engineering office or the project QA
13 manager at the site to initiate the IRC process.

14 (No hiatus.)

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1 Q Thank you.

2 Turning to page 15, you were discussing the
3 issue brought up by the Board in its sixth prehearing
4 conference order regarding the ANSI standards and
5 whether they should have been in a particular
6 specification. And in answer 25 you note that the NRC
7 inspector spotted the apparent omission of the standards
8 as something that had appeared in more than one audit.

9 Is the observation made by the NRC inspector
10 the type of observation that should have been made by
11 the trending program?

12 A Let me correct you.

13 Q Okay.

14 A Okay? The NRC inspector at this point in time
15 was looking at various quality assurance audit
16 deficiency documents, okay? The purpose of his
17 inspection was to conduct a follow-up on the corrective
18 action as a result of those audits.

19 The quality assurance manager at this point in
20 time knew perfectly well that both of those similar
21 deficiencies existed. The quality assurance manager
22 prepared the DEF specifically to cause documentation of
23 this particular situation to exist as a result of an IRC
24 determination. Which when he prepared the DEF in this
25 case, it was his inclination that the matter would not

1 be reportable. And as it turned out following the
2 evaluation and further investigation by the IRC, his
3 initial inclination was substantiated.

4 But in this case it was particularly important
5 to us, since this matter was raised by an NRC inspector
6 and he documented that fact in a NRC inspection report,
7 that we have documents in our IRC file which would
8 substantiate that we had, in fact, reviewed that matter
9 and made a determination relative to reportability.

10 Q Let me understand. Before the NRC inspector
11 came, HL&P's project QA manager was aware of the fact
12 that in two separate audits these particular standards
13 had not been seen by the auditor; is that correct?

14 A QA manager was aware that there were audit
15 deficiency documents written against specific purchase
16 specifications and that the subject of those deficiency
17 documents was there appeared to be an inappropriate
18 application of certain ANSI 45.2 daughter standards.

19 Q Before the NRC inspector came, had the project
20 QA manager consciously made the connection is what I'm
21 trying to get --

22 A Yes, he has.

23 Q That it was in one audit and it appeared in
24 another audit and there were, in fact, two audits
25 finding the same thing?

1 A Yes, he has.

2 Q But prior to the inspector coming, there
3 hadn't been a DEF prepared on that particular point?

4 A That's correct, sir.

5 Q I think that's where I was trying to head with
6 my question.

7 Would the trending analysis have picked that
8 up and created a DEF on that particular point that there
9 were two audits with a similar finding?

10 A The trending program does, in fact, capture
11 deficiency documents such as these, classify
12 deficiencies such as these. And if upon analysis of
13 those trends it was determined by the trend committee
14 that this indicated a significant trend, that would have
15 generated a deficiency evaluation form, yes.

16 Q But at this point -- do you know when the NRC
17 inspector came?

18 MR. GUTTERMAN: Are you looking for a date
19 here?

20 Q (By Mr. Sinkin) The date he came, the month?

21 A I don't recall, sir. I would have to refresh
22 my recollection with reference to the inspection report
23 83-12. I don't have a copy of that with me.

24 Q All right. But as of the time he came, the
25 trending program had not generated a DEF --

1 A That's correct.

2 Q -- on this item?

3 A Now, recall what I said. I said if this were
4 determined to be a significant trend by the evaluation
5 of the trend indicators, it would have initiated a DEF.

6 In any case, what we're talking about here are
7 a maximum of three specifications out of many hundreds
8 in which there appear to be an inappropriate application
9 of daughter standards, which on further investigation
10 turned out not to be the case. However, that number of
11 deficiencies within the large number of documents which
12 are processed and reviewed would not in my mind
13 constitute any breakdown of significance in the quality
14 program.

15 Q On page 16 at line 12, did the Bechtel failure
16 to detect the change in the scope of work and the
17 consequent failure to add the applicable standards to
18 the specification constitute in your view a potentially
19 reportable deficiency?

20 MR. GUTTERMAN: I'll object to the question
21 because I think it mischaracterizes the testimony. I
22 don't see anything here that refers to a failure to
23 detect a change in the scope of work.

24 MR. SINKIN: Well, perhaps it's that the scope
25 of work changed, but there was a failure to modify the

1 specification.

2 MR. GUTTERMAN: I still don't see the word
3 failure anywhere in the testimony. I suggest you just
4 ask him what the sentence means instead of trying to
5 read words into it that just aren't there.

6 Q (By Mr. Sinkin) When the audit deficiency
7 reports or whatever it was that detected -- I think it's
8 audit deficiency reports that originally detected the
9 standards that might be in question; is that right? It
10 was from an HL&P QA audit?

11 A Yeah. The specific documents were called
12 corrective action reports at that time.

13 Q Okay. Corrective action reports.

14 When the corrective action report for one of
15 the specifications was being dispositioned, did they
16 discover that the specification needed to be altered
17 because the scope of work governed by that specification
18 had changed?

19 A During the course of time over which the
20 response to the CAR, corrective action report, was being
21 developed, Bechtel decided that they would expand the
22 scope of work under this particular specification and
23 that expansion in the scope of work and the review of
24 that expansion resulted in Bechtel making a
25 determination that additional daughter standards than

1 had previously been specified would be called for.
2 Those additional standards were added to the
3 specification as a result of the Bechtel review.

4 Now, the reason that I put these words in my
5 testimony is simply because I wanted to cover the
6 eventuality that the testimony without those words would
7 not match if someone went back and checked the standards
8 because you would find that in this one case standards
9 that were called out in the corrective action report
10 were indeed added to the specification. But at the time
11 the CAR was written, the specification was correct.

12. Q On page 18 in answer 30, talking about the
13 program in effect today, at line 16 you say "includes a
14 mechanism to ensure that matters determined not to
15 require IRC review have received adequate
16 consideration."

17 Are you referring there to the requirement
18 that when detected, a deficiency be reported to the
19 appropriate supervisory personnel? Is that what you're
20 covering there? What do you mean by that particular --

21 A Okay, sir. What I'm covering there are two
22 things. One, the project licensing procedure PLP-02
23 provides that the IRC act within twenty-four hours on a
24 deficiency evaluation form which is recommended to them
25 for action by the engineering manager. And it similarly

1 requires them to take that same action on a Bechtel
2 deficiency evaluation report within twenty-four hours.

3 Those DEF's or DER's, as the case may be,
4 which do not contain that recommendation, that is an
5 engineering evaluation has concluded that the matter was
6 not significant, that there was no effect, adverse
7 effect on the safety of plant operations given that
8 deficiency, those particular DER's or DEF's are
9 subsequently reviewed by the IRC and the IRC at that
10 point in time either concurs with the engineering
11 manager's conclusion or Bechtel's conclusion, as the
12 case may be, or they cause the matter to be looked at in
13 a different light.

14 Q But that's a process that doesn't need to
15 happen in the twenty-four hours?

16 A That in my mind does not need to happen in the
17 twenty-four hours.

18 Q Turning to PLP-02, Section 4. Are the
19 definitions in Section 4.0 essentially the same
20 definitions used by HL&P in the Quadrex time period or
21 are there any significant differences?

22 A When I look at the procedure which was in
23 effect in that time frame, I'd look at the definitions
24 in that procedure or the way words are used in that
25 procedure because there is no specific definition

1 section in that particular procedure. They appear to be
2 consistent. The definitions themselves are -- well, the
3 source of them is the NRC guidance document of 1980.

4 Q In the section on final design, 4.1.3, it
5 states, "The drawing specification or other engineering
6 document must have been reviewed, approved and
7 released."

8 Is the implication of those words that the
9 design document must have been verified before section
10 50.55(e)(1)(ii) is triggered?

11 A I'm not sure I can give the best answer to
12 your question in the context of the words you ask it,
13 but let me see if I can put it --

14 Q If you have a problem with some word that I've
15 used, please let me know.

16 A Yes, sir.

17 Final design as approved and released for
18 construction in my mind and in HL&P's present practice
19 refers to a design document which has been released and
20 from which construction can proceed, irregardless of the
21 level of verification. Whether preliminary information
22 was used and that was subjected to some preliminary
23 verification or final data was used in calculations
24 which back up the design, it doesn't make any
25 difference.

1 Q Do you think that the wording there suggests
2 otherwise? It just struck me that way, that if you say
3 it's been reviewed and approved, there's a fairly strong
4 implication that you've actually done a design
5 verification.

6 A It says the document itself bears the
7 engineering department's stamp of approval that
8 construction can proceed. That's what those words mean
9 to me.

10 Q Okay.

11 And this definition is meant to include such
12 documents as system design descriptions and technical
13 reference documents?

14 A In the context that those documents in and of
15 themselves would be used by the construction
16 organization for fabrication, installation or
17 construction.

18 Q In 5.5.1, the last sentence, just a
19 clarification. You say a DEF must be prepared even
20 under circumstances where the information is known to be
21 covered by an NCR. Would that cover a CAR or any other
22 kind of deficiency report or do you mean to restrict it
23 only to an NCR?

24 A The reason that these words are in here, NCR's
25 are initially evaluated and screened for potential

1 significance by a Bechtel organization. And the
2 contingency which these words are meant to guard against
3 is the fact that an HL&P employee has knowledge of a
4 significant deficiency but he thinks, oh, well, that's
5 going to be covered under the Bechtel evaluation. And I
6 wanted to ensure that situations like that did not
7 escape undetected. The situation may eventually result
8 in production of both a DER and a DEF and that happens
9 quite often.

10 Q Turning to 6.4, the SPE is the supervising
11 project engineer, if I am correct. Is any special
12 training or guidance provided to the supervising project
13 engineer regarding what constitutes a significant
14 deficiency?

15 A He gets the normal 50.55(e) indoctrination
16 training and then periodic refresher training as regards
17 significance, yes, sir. But it's not special. You
18 called it special.

19 I might add they all from time to time receive
20 informal training from myself on what may or may not be
21 significant.

22 Q You counsel with them on a regular basis?

23 A Yes, I do.

24 Q Turning to 6.4.2. If a DEF is not to be
25 reviewed by the IRC, if that's the determination, you

1 say it's noted on the form and appropriate explanation
2 is given and copies are sent to the three people you
3 identify. And then if I'm correct, the IRC chairman
4 then has the opportunity to disagree with that
5 determination and initiate a review anyway?

6 A That's correct, sir.

7 Q In attachment 9.4, the second page, would I
8 be -- go down to the bottom where it says NRC
9 notification.

10 A Yes, sir.

11 Q It says "if required by section 6.6.6." Would
12 I be correct that that might be a typographical error?

13 A Well, let me --

14 Q Should that instead be 7.1?

15 A I don't think it's 7.1, but it certainly is a
16 typographical error.

17 Q Okay.

18 A There is no section 6.6.6.

19 Q Well, I did notice that.

20 JUDGE LAMB: Could it be maybe 6.7.3?

21 THE WITNESS: I appreciate the help, Judge
22 Lamb. Let me look at that one.

23 No, it's not 6.7.3. That would be covered by
24 the -- wait a minute now.

25 Q (By Mr. Sinkin) Let me be clear. The form --

1 THE WITNESS: Yes, it is, Judge Lamb.

2 Q (By Mr. Sinkin) It is. Okay.

3 And turning to attachment 9.7, I think there
4 may be an arrow missing, but I'm not sure.

5 A You're very astute, Mr. Sinkin, there is an
6 arrow missing. I have a revision to the procedure in
7 process at this moment to put that arrow back.

8 Q Would that be from the box significant
9 question mark to IRC verifies?

10 A Oh, wait a minute now.

11 Q Is that a different one?

12 Okay, here's the problem I had. If you start
13 with the managing engineer and he makes a determination
14 that something is not significant in that significant
15 question mark box, and the determination is no, the only
16 thing that happens is a copy goes to the originator, but
17 I don't think that's the case. I think there should be
18 an arrow from that significant question mark box to the
19 IRC verifies or is that not correct?

20 We're dealing again with that determination of
21 significance and I may not be understanding it
22 correctly. If the engineering reviewer determines it's
23 not significant, is that the end of the matter?

24 A You're correct. The arrow should go from the
25 box that says significant question mark to IRC

1 verifies.

2 Q They do get to see that?

3 A Yes, sir.

4 Q I thought so. Okay. I'll send you my bill in
5 the morning.

6 Under the current procedure, if a deficiency
7 is found which meets all of the notification
8 requirements for 50.55(e), but a reanalysis is currently
9 underway which will cover that deficiency, is a
10 notification made or not?

11 A The mere fact that a deficiency is quickly
12 corrected or is in the process of being corrected, which
13 would be the same thing as conducting a reanalysis, does
14 not have any weight relative to a determination of
15 reportability under 50.55(e).

16 Q Was the same true in May of 1981?

17 A The 50.55(e) requirements have not changed
18 since May of 1981.

19 Q Has the HL&P approach in terms of reanalysis
20 and its weight changed at all since 1981?

21 A I don't believe so, sir.

22 Q Does HL&P in any way rely on the fact that
23 Bechtel is reviewing something to alter the level of
24 review that HL&P gives it in terms of 50.55(e)
25 evaluation?

1 MR. GUTTERMAN: I'm not sure I understand the
2 question.

3 MR. SINKIN: Okay, maybe the question is not
4 very clear. Let me try again.

5 Q (By Mr. Sinkin) Does the fact that Bechtel
6 has reviewed something for potential notifiability in
7 any way influence the level of review that same item
8 receives at HL&P?

9 A Let me see if I can help you here.

10 Q Okay.

11 A If a matter initially came to the attention of
12 a Bechtel employee or engineer and it was subsequently
13 processed through a deficiency evaluation report, the
14 Bechtel procedure, evaluated for significance by the
15 Bechtel engineering department and then subsequently
16 referred -- subsequently not referred to the IRC, that
17 is they had determined that it did not meet their test
18 for reportability and simultaneously an HL&P employee
19 documented the same problem on a deficiency evaluation
20 form and it made its way through the HL&P engineering
21 team for an evaluation of significance and an alternate
22 conclusion was reached, that is the HL&P engineering
23 organization considered that it should be further
24 evaluated by the IRC, and the IRC by this point in time
25 had the copy from Bechtel that says, no, we don't think

1 it is and the one now arrives from the HL&P project
2 engineering manager, they're forced to make a decision.
3 By procedure they've got to consider the one they have
4 before them from the HL&P engineering manager. The mere
5 fact that it has been looked at and an opinion rendered
6 by Bechtel may provide them additional insight as to how
7 to conduct that evaluation, but it would not have any
8 more weight.

9 We have on many occasions reported things as
10 50.55(e) items which our architect engineer Bechtel had
11 concluded were not reportable.

12 Q Are you familiar with the report that was
13 handed to us today from INPO?

14 A I have not read that report, sir.

15 Q Well, let me ask if your counsel will provide
16 you with a copy of this report. And if you'll turn to
17 page 11 in review finding DC.5-3 which continues on to
18 page 12.

19 A You asked me just to look at the finding
20 DC.5-2.

21 Q Yeah. My question was --

22 MR. GUTTERMAN: Are we talking about dash 2 or
23 dash 3?

24 MR. SINKIN: I said dash 3.

25 Q (By Mr. Sinkin) Did you read 2?

1 A I read 2.

2 Q Well, let me look at 2.

3 A I think you'll find it interesting.

4 Q It's a good one, actually.

5 A Yeah.

6 Q Since you've read 2, let's start with 2. It's
7 as good an example as -- okay. Go ahead.

8 He's reading 3, so let him read 3.

9 Okay. Well, let's start with 2. As I
10 understand the problem identified in finding DC.5-2,
11 when drawings for the installation of HVAC duct is sent
12 out to the field, efforts to install according to those
13 drawings result in interferences with other commodities
14 already installed.

15 My question is if you had a pattern that this
16 happened more than once, you don't just have a single
17 interference but a series of times when drawings coming
18 out of engineering, in fact, cannot be installed because
19 there's an interference, do you think you have a
20 potentially reportable finding?

21 A Based on just the facts you gave me, I would
22 need a little bit more than that to go at this and I'll
23 tell you exactly how this thing is handled in the real
24 world.

25 Q That's fine.

1 A I know that during the course of this hearing
2 you have discussed the fact that a single interference
3 is not reportable, does not meet the reportability test,
4 okay?

5 Interferences are not classified as
6 nonconformances or deficiencies. A deficiency document
7 is not generated when you have an interference in the
8 field, it results in the generation of a field change
9 request. Field change requests, however, are trended in
10 the trending program.

11 The engineering manager wants to understand
12 the reasons for numbers of field change requests being
13 issued against one element of his engineering
14 organization and will want to come to grips with that
15 for several reasons. Number one, it's a description of
16 the efficiency of his organization for one thing and he
17 wants to make sure that it is indeed efficient in
18 getting appropriate and correct designs to the
19 constructors on schedule. And, number two, he wants to
20 understand if, in fact, there are a large number of
21 FCR's issued against one engineering organization,
22 whether or not there may be some broader programmatic
23 problem which would surface through his analysis of the
24 trends and FCR's. Now, if that broader problem were
25 sufficient to indicate that there were a significant

1 breakdown in the quality assurance program as required
2 by Appendix B, that matter then very well would merit
3 some further evaluation for reportability under
4 50.55(e).

5 Q Okay. Now let's try DC.5-3.

6 A Okay. I told you that I had not read this
7 document.

8 Q I understand.

9 A Okay. The findings themselves, however, I am
10 familiar with. This particular finding is the subject
11 of a 50.55(e) report which was filed -- my memory fails
12 me. We've made quite a few of those. I can't remember
13 the dates that we made them all on.

14 Q I think it would have been June 5th or
15 somewhere in there.

16 In the cover letter that accompanies that
17 document there's a reference to a June 5th, 1985 --

18 A Yeah, that reference there in the cover letter
19 is, of course, to the 30-day written report. So, the
20 actual 50.55(e) report was telephoned in.

21 Q I see.

22 A I think in this case 28 or 29 days before
23 that.

24 Q And it was on this item?

25 A Yes, sir. It was a potential 50.55(e).

1 Q I understand.

2 MR. SINKIN: Mr. Chairman, that may conclude
3 all I have. What I'd really like to do is take a
4 five-minute break and look through this INPO report
5 before I formally conclude. Or maybe this is the time
6 for just a regular break.

7 JUDGE BECHHOEFER: Why don't we take our break
8 now. I guess we might as well take it now.

9 Take a fifteen-minute break now.

10 (Brief recess taken.)

11 (No hiatus.)

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1 JUDGE BECHHOEFER: Back on the record.

2 MR. SINKIN: Thank you.

3 Q (By Mr. Sinkin) Discussing the INPO report
4 just a little more, Mr. Wisenburg, if you will turn to
5 Page 8, finding DC.3-2, if you have a finding like that
6 presented to you, does that trigger a potentially
7 reportable analysis?

8 A The finding in and of itself as it is
9 represented in this report doesn't provide me sufficient
10 information on which to make a determination whatsoever.
11 I did tell you that one of the items that were a finding
12 in the report had been subsequently evaluated and
13 determined to be reportable.

14 Q Right.

15 A We had the opportunity immediately upon
16 completion of the INPO evaluation to review the INPO
17 evaluation field notes. Those field notes included
18 information on the performance objective as it's
19 presented here in this report and their findings, their
20 recommendation. And then a rather detailed section which
21 recorded their specific observations.

22 Out of that section, one was able to draw a lot
23 of the detailed information which one would need to make
24 further conclusions relative to the significance or
25 potential significance of the matters.

1 In the case of finding DC.3-2, here it says,
2 "More attention is needed in the preparation, review and
3 approval of some engineering documents," a statement
4 which I think you would agree with me is motherhood.

5 A number of errors were noted in engineering
6 calculations, specific indications, drawing, design
7 change authorization requests; hardly a statement with
8 which you can do anything, you don't know the number of
9 errors; you don't know what type of errors we're talking
10 about here or how they may affect the final result.

11 When you get the opportunity to look at, in
12 this case, the evaluators' findings, those number, errors
13 were specified and one could tell on the face of them
14 whether or not they had any potential significance.
15 Initially, review of this one determined that they did
16 not have potential significance and no DEF was generated.

17 Q You had the opportunity to actually review the --

18 A I personally saw those.

19 Q -- notes. Okay.

20 A What I haven't seen here is the final wording
21 and anything relative to a response.

22 Q A response, that's right. I understand. Page
23 22, finding CC.7-1, where, in this instance, I think they
24 actually have been a little more detailed as to what
25 their deficiency findings were.

1 I'm wondering if a notifiable review was
2 initiated pursuant to criterion 14 of this particular
3 finding?

4 A A standard deficiency report was generated by
5 the quality assurance organization on this particular
6 matter. The deficiency is documented in -- on that piece
7 of paper, it was several pieces of paper in this case,
8 was evaluated by the quality assurance organization. And
9 determined not to merit further review for reportability.

10 Q And does their determination then go to the IRC
11 for review?

12 A Their determination is not a matter which is
13 formally submitted to the IRC for subsequent review and
14 follow up. However, their determination which is evident
15 on the face of each and every SDR, it has a block which
16 is checked yea or nay relative to potential significance
17 in the context of 50.55(e).

18 Those documents are routinely distributed to
19 cognizant HL&P managers. Being the licensing manager,
20 I'm subject to a deluge of those particular type
21 documents. I provide the ones that I find particularly
22 interesting to Mr. Powell and my engineering kept for
23 further scrutiny.

24 Q Did this particular one come your way?

25 A This particular one I was personally aware of;

1 I don't recall seeing in it my review but I concurred
2 with the quality assurance department's initial
3 determination.

4 Q If we could look at two findings in conjunction
5 with each other, if you would look at Page 21, finding
6 CC.5-1, and page 39, finding QP.3-1.

7 A 39?

8 Q Page 39, QP.3-1.

9 JUDGE BECHHOEFER: What's the other one?

10 MR. SINKIN: The first one is Page 21, finding
11 CC.5-1.

12 Q (By Mr. Sinkin) I'm particularly picking up on
13 the performance of quality control inspectors in the
14 first finding, and then again the second finding dealing
15 with the performance of quality control inspectors.

16 I guess my question would be whether those two
17 findings -- well, first, did you review these -- did you
18 review the hold INPO final report that gave their
19 observations in detail?

20 A Yes, I did, sir.

21 Q You did. So you've reviewed all these we're
22 talking about?

23 A Yes.

24 Q My question would be: In your view, did the
25 finding 5-1 combined with the finding 3-1 suggest anymore

1 systematic problem with the --

2 A No.

3 Q -- with the QC inspectors performance?

4 A No, the basis for my conclusion there is when
5 you look at the observational part of the data sheets
6 that were provided to us for review, it was the same
7 deficiency, not a trend of deficiencies.

8 The words were exactly the same on both
9 observation sheets. This was one particular
10 circumstance.

11 Q I did want to go back to, in PLP-02, the
12 attachment 9.7, the flow chart, you mentioned that there
13 was a change being in process. I was wondering what the
14 change was that was in process?

15 A The reason I pause here is I'm embarrassed.

16 Q Oh, dear.

17 A My licensing department is much more efficient
18 than I thought it was. The change has been issued.

19 Q I see.

20 A And that is indeed the change, the arrow from
21 the box labeled "significant question mark" to "IRC
22 verifies," the arrow pointing from the box with the word
23 "Significant question mark" in it to the box "IRC
24 verifies."

25 MR. SINKIN: That concludes my

1 cross-examination, Mr. Chairman.

2 JUDGE BECHHOEFER: Mr. Reis.

3 CROSS EXAMINATION

4 By Mr. Reis:

5 Q Mr. Wisenburg, looking at question 19, on page
6 12, in this procedure you talk about here, are matters
7 relating to ALARA requirements subject to 50.55(e)
8 reporting?

9 A The fact that a matter, a deficiency, may
10 relate to an ALARA requirement, does not rule out the
11 fact that it may be cause to look further for 50.55(e)
12 reportability.

13 50.55(e) applies in general to safety related
14 systems and those non-safety related systems whose
15 failure or a deficiency in which could cause a safety
16 related system not to perform its intended safety
17 function.

18 So the link is there; the mere fact that ALARA
19 is not Appendix B or safety related, does not prevent one
20 from looking further into the specifics surrounding a
21 deficiency in the ALARA program to determine whether or
22 not that may have some impact on the safety of the plant
23 operations.

24 MR. REIS: Thank you, that's all I have.

25 JUDGE SHON: I've got two questions.

1 JUDGE BECHHOEFER: you want to go first?

2 BOARD EXAMINATION

3 By Judge Shon:

4 Q I have about two questions, Mr. Wisenburg. One
5 relates to PLP-02, and it's on page 5 of PLP -- wait a
6 minute. It's marked page 5 of 24; section 4.3.4, that
7 you discussed awhile ago, with with Mr. Sinkin, the
8 incident review committee section; I notice a change bar
9 on exactly the sentence you were discussing with him, and
10 I note the date issued at the top of the page says
11 5-21-85.

12 Does that mean that the power vested into the
13 group vice-president nuclear to assemble his own IRC has
14 only existed in the books, on the books, so to speak,
15 since 5-21-85?

16 A No, sir, that does not mean that. The
17 procedure read in the previous revisions, that the
18 vice-president nuclear engineering and construction had
19 that power.

20 This change, and the date reflect about that
21 point in time when Mr. Goldberg's title changed from
22 vice-president nuclear engineering and construction to
23 group vice-president nuclear.

24 Q The change bar reflects the title change?

25 A Yes, sir, and reflects the change in reporting

1 relationship in our organization.

2 MR. GUTTERMAN: If this might help you, Judge
3 Shon, I think that's shown in the first page of the
4 exhibit. Item 5, explains what that change was.

5 JUDGE SHON: Yes, uh-huh.

6 Q (By Judge Shon) In the INPO report, DC.5-2,
7 that you were asked about, very early on, on page 11; you
8 had said that you did not think things like, things of
9 this sort, would result in reportable deficiencies under
10 50.55(e).

11 Mr. Goldberg had essentially told us earlier on
12 that in his view, an interference, a field discovered
13 interference in general, wouldn't result in such a report
14 simply because it can't be constructed and hence can't be
15 left uncorrected. Is that your view, also?

16 A Yes, that's my view also.

17 Q (By Judge Lamb) Mr. Wisenburg, on page 6 of
18 your testimony, answer 8, this deals also with what you
19 were just discussing a few minutes ago with Judge Shon,
20 this arrangement where the committee that was set up to
21 review the Quadrex report was part of the approved
22 procedure; is that correct? Was this recognized as an
23 approved procedure at that time?

24 A The procedure that was in effect for the normal
25 functioning of the IRC designated PEP-11, I think at that

1 point in time, which was introduced in company with a
2 memorandum which included some description of departures
3 from that procedure which were indeed in effect and then
4 taking together that formed the procedure, it does not --
5 it's silent on that particular aspect of the convening of
6 a committee by the executive, by executive management to
7 perform the functions of the IRC.

8 That does not mean that executive management
9 does not have the authority to convene if they so choose
10 a committee to perform a special function, and then
11 subsequently document that departure from the procedure.

12 Q If I'm reading you correctly, then that was not
13 part of the official procedure?

14 A It was not a built in.

15 Q It's been built in since then?

16 A Yes, sir.

17 MR. GUTTERMAN: I think Mr. Wisenburg was
18 referring to CCANP Exhibit 71, Judge Lamb.

19 JUDGE LAMB: Thank you.

20 Q (By Judge Lamb) Now, Page 8, answer A-11, in
21 particular the last sentence of that lines 5 to 8, when
22 the IRC chairman notifies in Goldberg and you, do you
23 clear or approve the notification procedure or is that
24 done automatically?

25 Practice is as follows, okay? Given the

1 eventuality that either Mr. Goldberg and myself are not
2 available, the IRC chairman's directions are clear, he
3 makes a telephone call within 24 hours. Okay?

4 If I am available, he discusses with me the
5 particulars of the matter that he is going to make a
6 telephone call on. I do several things during the course
7 of that discussion.

8 No. 1, I review in general his reasoning in
9 making the reportability determination; I ensure that he
10 has enough information to provide the NRC, to describe
11 the problem sufficiently; and in doing that, I am so
12 informed of the details of the situation.

13 And then I subsequently inform Mr. Goldberg if,
14 in fact, I'm there. Okay? The reason that we have this
15 procedure in place is to provide for informing executive
16 management so they would be prepared to respond
17 immediately to a telephone call coming back from the
18 region for more details if that was appropriate.

19 During the course of my review with the IRC
20 chairman, I do, in fact, concur with his determination.
21 Okay? They report to me the results of all IRC
22 determinations. In reviewing those determinations with
23 the IRC chairman subsequent to an IRC meeting, I have
24 never caused a telephone report not to be made. That is
25 I have never overturned an IRC determination that a

1 matter was potentially reportable.

2 I have on several occasions caused them to
3 reconvene and consider matters further, that eventually
4 result being that a telephone call was decided
5 appropriate.

6 Q You are saying you have not vetoed a telephone
7 call?

8 A I've not vetoed a telephone call but I have
9 suggested that they go back and review aspects of a
10 problem that they may have overlooked and upon completion
11 of that review, they have changed their mind and decided
12 to report instead of not report.

13 Q I see. So you or Mr. Goldberg, if I am
14 understanding you correctly, would have veto power
15 presumably but have not so exercised?

16 A That's correct.

17 Q Except in the direction of encouraging more
18 telephone calls?

19 A That's correct.

20 Q About how often does that happen, do you have
21 any feel for that?

22 Is that a frequent occurrence?

23 A No, sir, it's not frequent. It would occur
24 probably, maybe one in fifteen or twenty evaluations.

25 Q Now, page 10, answer 16. Does the IRC respond

1 only to the trigger of receiving a DEF or DER?

2 A The IRC also responds to additional triggers;
3 those triggers are a notification by a vendor that he has
4 filed a Part 21 which may have a bearing on South Texas.
5 Notification from NSSS vendor, Westinghouse, that he has
6 reached a conclusion that a matter is reportable under
7 50.55(e).

8 In all cases, the IRC reacts to a trigger that
9 there is a significant deficiency. The IRC, however,
10 does not react to allegations or suspected deficiencies,
11 those are documented on DEF's and subjected to an
12 evaluation for significance by the engineering manager if
13 they are HL&P originated.

14 Q In other words, it requires -- it requires a
15 written DEF or DER to initiate this process, with a
16 couple of exceptions that you mentioned.

17 A Yes, sir.

18 Q Once that process is initiated, they been
19 presumably within 24 hours, there is a yes or no answer
20 to determined by the IRC with respect to reportability?

21 A That's correct, sir.

22 Q On page 11, sentence between lines 7 and 11,
23 you mentioned the form of procedure for notification of
24 the resident reactor inspector. That's not required now?

25 A In fact, notifying the resident reactor

1 inspector at the site does not give you any credit for
2 making a 50.55(e) report. Okay. We do inform; will he
3 keep the residents reactor inspector informed of
4 reportability, notifications to the NRC.

5 The approved procedure is to make the initial
6 telephone call to the Region IV administrator's office
7 and if that happens to be after hours, and there's no one
8 there, you get a telephone link to the NRC duty officer
9 in Washington and that's the approved method of making
10 the 24-hour notification.

11 Q Mr. Wisenburg, have you read the Quadrex
12 report?

13 A I have not read the Quadrex report in its
14 entirety, sir.

15 Q You've read parts?

16 A I've read sections of it. I've made no attempt
17 to evaluate findings on my own.

18 Q Well, let me know if you've read enough to
19 respond to the question and what I wanted to ask you was
20 whether in your view, the Quadrex report either in whole
21 or in part represented a breakdown in quality assurance?

22 A I think I've read enough to answer that
23 question, sir. In my view, it does not represent a
24 breakdown in quality assurance.

25 Q Why not? Could you explain to us what leads

1 you to that conclusion?

2 A The findings represented in the Quadrex report
3 do not go to the quality of the engineering work as much
4 as they go toward work that needs to be done or work
5 that's being done in an inefficient manner.

6 There are deficiencies which are real which
7 did, indeed, mere it evaluation for reportability under
8 50.55(e), but no widespread and systematic breakdown of
9 the quality assurance program.

10 JUDGE LAMB: Thank you.

11 Q (By Judge Bechhoefer) Mr. Wisenburg, would you
12 look at or have your counsel show you CCANP Exhibits 94
13 and 95.

14 I'm not going to ask you anything about the
15 substance so much as I -- my question is. Are these
16 documents typical of the type of IRC documentation which
17 would have occurred back in the 1981, spring of 1981
18 period of time?

19 A Yes, they are, Chairman Bechhoefer.

20 Q This would be -- these would be examples of
21 items which were found not to be reportable?

22 A That's correct.

23 Q Now, if under current procedures, would the
24 Quadrex report under current procedures have been
25 referred as a whole to the IRC for review?

1 A Let me answer that in the form of if we were to
2 receive a consultants report how might that be handled
3 for a reportability review. Is that the question you're
4 asking?

5 Q Right.

6 A If I were to receive a large or lengthy and
7 detailed consultants report, my recommendation on the way
8 that that would be handled for reportability would be to
9 appoint a team of experienced HL&P engineers to review
10 the report for the purpose of identifying findings if the
11 report is structured in that manner, or evidence of
12 deficiencies, which they believe may be significant.

13 Now, the result of that review would be the
14 production of a deficiency evaluation form for each
15 individual deficiency; where there were deficiencies that
16 were grouped to be like or similar, those would be
17 grouped on a common deficiency evaluation form.

18 That deficiency evaluation form would then be
19 forwarded to the project engineering department; they
20 would perform their normal review of those deficiencies
21 for significance; make a determination relative to
22 significance, then further forward any of those reports
23 which they determined were significant to the IRC for
24 further evaluation relative to reportability. Now,
25 obviously all that wouldn't happen in 24 hours. And in

1 my mind, it does not need to happen in 24 hours under the
2 regulations.

3 Q Well, what would the documentation trail look
4 like, in a process like this, not only of items which
5 turned out to be reportable but also of findings which
6 were not determined not to be reportable?

7 A The documentation trial would consist of a
8 separate IRC file folder for each deficiency evaluation
9 form which was forwarded to the IRC. Okay? Those would
10 be the once they considered. If in their consideration,
11 of that report, they determined it to be not reportable,
12 you would likely see documentation of the nature
13 represented by CCANP exhibits 94 and 95.

14 For those matters which they determined to be
15 reportable under 50.55(e), the documentation would start
16 the same way, fairly similar with this, in addition to
17 these type of documents, you would also see the completed
18 checklists required by PLP-02, copies of any back up
19 information that the IRC may have used to reach their
20 determination, any deficiency documents which were
21 referenced on the deficiency evaluation form, itself,
22 that is any pertinent NCR's, corrective action reports,
23 et cetera; the file folder and record on matters which
24 are reported then continues to grow because it also
25 contains the subsequent written reports to the NRC.

1 What would be missing from the file would be
2 documentation on a finding in the consultants report in
3 this case, which had not be determined to merit even the
4 filling out of a deficiency evaluation form on the part
5 of the engineering task force or team who conducted the
6 initial screening of that report.

7 Q Would there be any documentation of the
8 decisional record on those? Those types of findings?

9 MR. GUTTERMAN: Are those, Mr. Chairman, you
10 mean the ones that --

11 JUDGE BECHHOEFER: That didn't get as far as
12 IRC that wouldn't have gotten as far as --

13 MR. GUTTERMAN: Would not have gotten a DEF
14 filled out.

15 JUDGE BECHHOEFER: That's correct.

16 A The only documentation that would relate to
17 those type of findings would be documentation relating to
18 the formation of the group that undertook the review of
19 the consultants report, their criteria and instructions
20 for conducting that review.

21 The documentation would be silent on the fact
22 that an engineer looked at a particular finding and on
23 its face determined it merited no further evaluation,
24 much the same as if I were to make a tour of the plant
25 site and asked myself a question relative to a particular

1 situation that I saw out there and in my own mind, that's
2 okay, it doesn't merit further review, no documentation
3 produced of that type of a decision either.

4 Q Are you familiar enough with the Quadrex report
5 to know, to be able to give an opinion as to whether any
6 of the findings, other than the -- well, I was going to
7 say three, but three areas reported, would have gotten as
8 far as the IRC; in other words, would would a DEF form
9 have been filled out.

10 You're not that familiar?

11 A I don't know really whether I could answer that
12 because it involves more than just familiarity with the
13 IRC C or with the Quadrex report, itself; it would also
14 involve a subjective judgment on my part as to how my
15 engineering team might react and what they might
16 document.

17 I would assume that they would produce more
18 deficiency evaluation forms to be subjected to further
19 evaluation than the three that eventually were reported.
20 But whether or not those would go to the IRC, I'm in no
21 position to call it.

22 Q Well, what I'm drying to drive at is to whether
23 on the Quadrex review, there should have been anymore
24 documentation than there was --

25 A Well, my reading of --

1 Q -- of the non-reportable items?

2 A My understanding of the NRC documents, required
3 records, would indicate to me that what is required is
4 evidence that a review for reportability has taken place,
5 that is a description of the deficiency the circumstances
6 surrounding how it came to be reviewed, and its final
7 disposition. And my reading of the NRC guidance
8 documents would indicate that that is what the Nuclear
9 Regulatory Commission is looking for in the way of
10 documentation of 50.55(e) review activities.

11 Q Right. Now, with respect to the Quadrex
12 report, I believe the testimony that we've heard from
13 several individuals, Mr. Goldberg as well as others,
14 mentioned that the documentation included the Brown &
15 Root reviews of each item but that there were other
16 factors which were used by the committee that reviewed
17 the Quadrex report and their apparently was not very
18 much, if any, I guess there was none, no documentation of
19 those other factors; would that appear to be somewhat of
20 a departure from at least current procedures?

21 A I have had the opportunity to review that Brown
22 & Root documentation package. It does include a
23 description of the review process, a description of the
24 deficiencies and if you couple that with the Quadrex
25 report, itself, then you have a fairly concrete record of

1 what deficiencies where evaluated; has has a check sheet
2 for each item which was considered, which on the check
3 sheet indicates whether or not in the opinion of Brown &
4 Root, the matter would have been reported, and indicates
5 the reason for non-reportability in the case where it's
6 not reported.

7 If I bump that now against the standard in the
8 NRC guidance, I made a subjective determination that yes,
9 that's what NRC is looking for. No, it doesn't capture
10 in detail the thinking that went on in the evaluation
11 process and all the various reasons which may come into
12 play as to why something may or may not be reportable but
13 it does give a good succinct statement that this is the
14 deficiency, it was considered for reportability, it
15 either was or it wasn't reportable, and one or two
16 sentence statement as to the reasoning behind that
17 determination, in the case of those that were determined
18 not to be reportable.

19 Q Yes. Yes.

20 A On that basis, I would say that it would stand
21 up if one where evaluating it against the NRC guidance
22 document. It wouldn't be, I mean the the record that
23 would be produced today if such a task were undertaken,
24 would probably be much more detailed than that.

25 Q If this review committee happened to be looked

1 at as a committee such as, committee other than the IRC
2 appointed by the group vice-president, the kind that --
3 well, the kind that is referenced in section 4.3.4 on
4 PLP-02, the kind of shall we say extraordinary group
5 about which you answered a lot of questions, if that
6 group were set and included the same members as if
7 review committee which reviewed Quadrex, you are saying
8 their documentation would be somewhat more elaborate or
9 complete or --

10 A As I answered in my previous testimony, I would
11 find it hard to believe that Mr. Goldberg would set up
12 such a committee without either myself on it or Mr.
13 Powell. And that in fact under the current project
14 procedure PLP-02, that committee would function as the
15 IRC. And that the documentation requirements attendant
16 PLP-02 would in fact be adhered.

17 (No hiatus.)
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1 Q (By Judge Lamb) Are you saying then that the
2 documentation under the circumstances that prevailed
3 when the Quadrex report was reviewed, that the document
4 that you would expect to see today would be more
5 extensive than it was at that time?

6 A Yes, sir.

7 Q Is that a conscious change in, well, company
8 policy, if you will, or procedure? Or is that a
9 result --

10 A I don't know whether I'd characterize it as a
11 conscious change. But by the mere fact that the
12 procedure PLP-02 exists as it does today which requires
13 documentation --

14 Q Which it did not then?

15 A Did not then.

16 Q So, you feel that the existence of that
17 procedure would lead to a more definitive documentation
18 today than actually occurred with the Quadrex.

19 A Yes, sir.

20 Q Thank you.

21 Q (By Judge Bechhoefer) Just for comparison
22 purposes, how is this INPO, I N P O, report handled in
23 terms of IRC review? I assume at least one item was
24 sent to the IRC.

25 A Three items were sent to the IRC. Or, excuse

1 me, sir, three deficiency evaluation forms were
2 generated as a result of the review of the INPO report.
3 Two of those were considered to be not significant by
4 the engineering manager, one forwarded on to the IRC
5 subsequent to reporting.

6 Q Now, would your company have created any
7 further records discussing the other findings? Or did
8 your company --

9 A No, sir. If I understand your question
10 correctly --

11 Q Other than the three you just mentioned.

12 A No, there are no other records which would
13 make their way into the IRC file relative to that review
14 other than the three deficiency evaluation forms which
15 were generated.

16 Q Right.

17 A And then their disposition.

18 Q But are there other company records which
19 reflect that?

20 A The report itself is a company record which
21 lists the findings and would provide the members of the
22 NRC an opportunity to audit our performance against
23 their standard.

24 Q Mr. Wisenburg, are you familiar with the I&E
25 guidance on 50.55(e) reporting? There's a guideline

1 document which I believe is --

2 A You're referring to the NRC guidance document
3 titled Guidance 10CFR50.55(e) Construction Deficiency
4 Reporting with an issue date of April 1, 1980?

5 Q Right.

6 A Yes, sir.

7 Q Right.

8 Well, I would refer generally, and I can find
9 it if I have to, to the provision dealing with a
10 suggested guideline of fourteen days for developing
11 information after which if further study is still
12 required, a notification of potential reportability at
13 least would be made.

14 Are you familiar with that provision?

15 A Yes, sir.

16 Q My question is how or is that provision
17 reflected in the PLP-02 procedures?

18 A The only time periods, of course, which are
19 specified in PLP-02 are those time periods which appear
20 in the regulation 10CFR50.55(e) itself, the 24 hours for
21 notification determination given that a significant
22 deficiency exists and the 30 days for a written report.

23 Fourteen days does not appear in that
24 procedure. And I intentionally did not put fourteen
25 days in there for the following reason: If I put

1 fourteen days in there, I would find that all my
2 deficiency evaluation reports that were forwarded to the
3 engineering department for evaluation would come back in
4 fourteen days. My procedure instead says in several
5 places that expeditious reviews are conducted, that the
6 DEF is hand carried. And in my training on the
7 procedure I stress the fact that that engineering
8 evaluation is to be done as promptly as possible and
9 that the NRC guidance would allow us fourteen days as a
10 target to complete such an evaluation and that that
11 should be the maximum amount of time that it takes, not
12 the rule.

13 And that's basically the reason why the
14 fourteen days was not included in PLP-02.

15 Q How are these guidelines or the circumstance
16 that that's a maximum, how is that communicated to the
17 engineering reviewers --

18 A That's communicated in my -- in the regular
19 50.55(e) training sessions. And I communicate that
20 particular aspect of the review frequently in the
21 informal sessions I talked about with the supervising
22 project engineers.

23 I am also able to monitor their performance
24 because engineering keeps a log of those deficiency
25 evaluation forms which are received with the number of

1 deficiency evaluation form and the date they received
2 it. I could tell if I haven't gotten anything out,
3 forwarded to the IRC within fourteen days of their
4 receipt and I need to go find out what's going on, have
5 they reached a conclusion that it's not reportable or
6 are they still considering it for some reason.

7 Q I see. So, it's not likely that, for example,
8 after six months and nothing's happened that it would
9 fall in the crack someplace?

10 A That's not likely, sir. It is likely that we
11 may take fifteen days on occasion or sixteen days. But
12 in my mind, that's not a violation of the spirit of this
13 fourteen-day guidance in the NRC document.

14 Q Well, it is a guideline.

15 But you do think you have adequate controls to
16 prevent something from I use the term falling in a
17 crack?

18 A Yes, sir, I do.

19 Q Could you give perhaps a little elaboration of
20 the training sessions that you described with respect to
21 the reporting procedures?

22 A Yes, sir. In those training sessions which we
23 conduct on a repeating frequency, it's not every six
24 months for one organization because sometimes they
25 become difficult to schedule, but routinely on a

1 recurring frequency we cover the basic regulation
2 itself, the requirements of PLP-02, elements of the NRC
3 guidance document, that's where the fourteen days comes
4 into the picture. The main thrust of those training
5 sessions is to stress the fact that we are not asking
6 individual engineers to make determinations relative to
7 reportability or significance, but to ensure that they
8 document on the DEF any deficiency which in their mind
9 they may feel constitutes a significant deficiency.

10 Then to support that, we cover examples of
11 deficiencies which have been considered by the IRC and
12 giving them the reasons that they were reported or not
13 reported and use deficiencies which fall in each of the
14 50.55(e) criterion. That is a deficiency in final
15 design, quality assurance, programmatic breakdowns,
16 departure from performance, specifications and
17 construction damage.

18 Q Which employees are included?

19 A Okay. All HL&P engineering, quality
20 assurance, safe team, Mr. Frazar's engineering
21 assurance, Mr. Robertson's nuclear field department and
22 nuclear services department, our procurement
23 organization as to their responsibilities relative to
24 receipt of potential Part 21 type information. I
25 believe the only HL&P employees on the project that do

1 not get that training are the accountants.

2 Q Is the evaluation check list which you
3 mentioned on page 12 of your testimony, is that a new
4 development since 1981? This is in answer 20.

5 A Yes, sir.

6 Q When did that occur? Recently?

7 A That occurred in I believe the initial
8 issuance of PLP-02. That was in late May 1981.

9 MR. GUTTERMAN: I didn't hear that last
10 answer. What was the date he gave?

11 (The requested portion of the answer was read
12 by the Reporter.)

13 A Chairman Bechhoefer, excuse me, it was late
14 May 1982. I'm sorry.

15 Q (By Judge Bechhoefer) In describing the
16 unresolved item 83-12-01 which we mentioned and you
17 described in your testimony, did the IRC document its
18 determination?

19 A Yes, sir.

20 Q So, that would have looked something like this
21 document I showed you?

22 A Yeah. In this case the subject corrective
23 action reports would be included in the documentation
24 package and the record of any meetings or discussions
25 which were held in the course of the IRC review over the

1 24 hours.

2 JUDGE BECHHOEFER: That's all the questions
3 the Board has.

4 Mr. Gutterman?

5

6 REDIRECT EXAMINATION

7 BY MR. GUTTERMAN:

8 Q Mr. Wisenburg, earlier when you were
9 testifying about how the deficiency evaluation reports
10 are handled, I wasn't sure I caught exactly the sequence
11 of the way deficiency evaluation reports transferred
12 from Bechtel to HL&P. Could you review that for me?

13 A Deficiency evaluation reports which are
14 reviewed by the Bechtel organization and determined to
15 merit further review for reportability by HL&P are
16 forwarded to HL&P through the HL&P engineering
17 organization. They're hand carried.

18 There is an instruction to Bechtel relative to
19 who they deliver those DER's to. The first priority is
20 to put it in the hands of the engineering
21 representatives who would then hand carry it to the
22 chairman of the IRC.

23 I believe in my earlier testimony I said they
24 were immediately hand carried to the chairman of the IRC
25 and that's not exactly correct. They do pass through

1 the engineering organization so that they can be logged
2 in. But the 24-hour clock relative to reaching a
3 determination on the IRC's part starts as soon as that
4 piece of paper is delivered to HL&P. And that would be
5 into the engineering organization.

6 Q Okay. Let me hand you a document I'm going to
7 ask be marked as Applicants' Exhibit I guess we ought to
8 call it 66-A.

9 (Applicants' Exhibit No. 66-A marked for
10 identification.)

11 Q (By Mr. Gutterman) Can you tell me what
12 Applicants' Exhibit 66-A is?

13 A Applicants' Exhibit 66-A is the revision to
14 the project licensing procedure PLP-02 which I referred
15 to in my testimony as being in the process of being
16 developed. It has, in fact, been approved by Mr. Powell
17 and issued and the issue date was 7-25, 1985.

18 If you refer to attachment 9.7, that is the
19 flow chart which Mr. Sinkin was questioning me about.
20 The revision on that flow chart is indeed the arrow that
21 Mr. Sinkin noted was missing.

22 Q Thank you.

23 MR. GUTTERMAN: Those are all the questions I
24 have.

25 Oh, I guess one other thing. Mr. Chairman,

1 I'll move the admission of Applicants' Exhibit 66-A into
2 evidence.

3 MR. PIRFO: No objection.

4 MR. SINKIN: No objection.

5 JUDGE BECHHOEFER: Okay. Applicants' Exhibit
6 66-A will be admitted.

7 (Applicants' Exhibit No. 66-A admitted in
8 evidence.)

9 MR. GUTTERMAN: That completes the redirect.

10 JUDGE BECHHOEFER: Mr. Sinkin?

11

12

RE CROSS EXAMINATION

13 BY MR. SINKIN:

14 Q Well, I'll send you the bill for the 6.6.6 and
15 reduce it.

16 Anyway, in response to the question from I
17 believe it was Judge Shon regarding the executive
18 management of HL&P creating a committee to perform a
19 review, when you used that term executive management,
20 who are you referring to?

21 A I'm referring principally to Mr. Goldberg.

22 Q Is there anyone else in HL&P that you consider
23 as executive management?

24 A Yes, but not that would have direct
25 responsibilities for the nuclear program.

1 Q So, you would not consider in the context as
2 you used the term Dr. Sumpter?

3 A No, sir, I would not. The context I used the
4 term, I have to refer to the management level to which I
5 report. I report to Mr. Goldberg. He is the only one
6 that could give me direction relative to the
7 implementation of PLP-02.

8 Q You said that both you and Mr. Goldberg have
9 veto power over an IRC determination. If you did
10 exercise that veto power, I assume that would also be
11 documented?

12 A Yes, sir, it would be.

13 Q Have there been any occasions when you have
14 sent the IRC back to reconsider their finding that they
15 wanted to make a notification and they have reconsidered
16 and not made a notification?

17 A No, sir, there have not.

18 Q In terms of the documentation that you
19 consider meeting the guidelines of the NRC, you were
20 discussing that with the Board. Do you consider
21 documentation of a review by a contractor as meeting the
22 documentation requirements applicable to HL&P itself?

23 MR. GUTTERMAN: I'm not sure I understand the
24 question.

25 MR. SINKIN: Well, he referred --

1 JUDGE BECHHOEFER: Are you talking about
2 Bechtel?

3 MR. SINKIN: Bechtel.

4 Q (By Mr. Sinkin) Do you consider Bechtel's
5 documentation of a review for reportability to satisfy
6 the requirements or at least the guidance regarding
7 HL&P's documentation?

8 A For the purpose of substantiating whether or
9 not a specific deficiency was ever considered for
10 reportability, yes, I do. If that's the context in
11 which you're asking the question.

12 Q Well, let me try and tie together something
13 that you and I discussed earlier about Bechtel does a
14 certain review of potential reportability, does that
15 influence the level of review given by HL&P.

16 Are you saying that if Bechtel documents a
17 review for potential reportability, that that lessens
18 the need for documentation on the part of HL&P?

19 A There may be matters which are identified by a
20 Bechtel engineer in the field or that are discovered as
21 a result of a review of a nonconformance report which
22 are documented on the Bechtel deficiency evaluation
23 report form, reviewed and evaluated by the Bechtel
24 engineering organization and determined to merit no
25 further consideration relative to reportability under

1 50.55(e).

2 Procedurally, for all intents and purposes,
3 the process stops there. Now, we have directed Bechtel
4 in the form of a letter that we require them to forward
5 those DEF's which did not pass that milestone to us for
6 our overview and in that respect we conduct a follow-up
7 review of what they had done to that point. But neither
8 the original DEF in this case that Bechtel considered,
9 nor the copy of it that they forward to us for our
10 overview subsequently end up in the IRC, HL&P IRC file.

11 MR. GUTTERMAN: I'm not sure -- if I can
12 interject because I think Mr. Wisenburg may have
13 mispoken a little bit.

14 I think you said DEF and I think you might
15 have meant DER.

16 THE WITNESS: I frequently transpose the terms
17 because I deal with them all the time.

18 A I'm referring to in this case Bechtel
19 deficiency evaluation reports, DER's.

20 Q (By Mr. Sinkin) And you're saying the Bechtel
21 DER might not show up in the IRC's file of reviewing the
22 matter because the IRC generates its own documentation;
23 is that what you were saying?

24 A That's not what I'm saying at all.

25 Q Okay.

1 A I'm saying if a matter is reviewed by Bechtel,
2 evaluated as not significant, that copy of the DER
3 itself will not appear in the IRC file. The IRC file is
4 maintained only of those items which the IRC meets to
5 consider whether or not the reportability aspects are
6 met. It doesn't contain all the documentation of
7 matters which may have been determined for significance.

8 Now, I might add that's not to say that those
9 documents don't exist in their appropriate file. They
10 aren't --

11 Q They're in a file of the IRC somewhere.

12 A And they are, in fact, a part of the quality
13 assurance records system for HL&P and for the South
14 Texas Project.

15 MR. GUTTERMAN: I'm sorry, Mr. Sinkin, did you
16 ask Mr. Wisenburg if those files were kept at the IRC?

17 Q (By Mr. Sinkin) My understanding is that even
18 a determination that there was no significance would
19 lead to a forwarding of the DER to the IRC at some
20 subsequent period. Is that --

21 A If a finding by Bechtel results in their
22 conclusion that that matter need not be considered
23 further for reportability. Now we've got that straight?

24 Q Yes.

25 A They routinely forward those copies of

1 deficiency evaluation reports to HL&P for overview.
2 Now, that overview is a screening process, an audit
3 process by our engineering representatives, Mr. Powell
4 and myself.

5 Q The IRC chairman does get --

6 A That's just a check. Yes, that's just a
7 check. But copies of those particular deficiency
8 evaluation reports are not made a part of the formal IRC
9 file.

10 Q Mr. Powell doesn't keep a file of those
11 particular reports; is that --

12 A I am not -- he has no requirement to, no.

13 MR. SINKIN: I think that's all I have, Mr.
14 Chairman.

15 JUDGE BECHHOEFER: The Staff?

16 MR. REIS: The Staff has nothing more.

17 JUDGE BECHHOEFER: I have one follow-up
18 question dealing with Bechtel.

19 ~~Use~~ Bechtel itself in conjunction with the
20 South Texas Project at least have an IRC?

21 THE WITNESS: They don't have a committee
22 called the IRC, no, sir. Their activities are governed
23 by a Bechtel procedure which prescribes that deficiency
24 evaluation reports, the form, be generated when there is
25 grounds for a Bechtel employee employed on the project

1 to suspect that there may be a deficiency which is
2 significant.

3 That deficiency evaluation report form is then
4 validated, logged in and subsequently reviewed for
5 significance by the Bechtel engineering organization.
6 Their procedure requires that the evaluation take place
7 within ten working days.

8 At the end of that ten working days, they
9 either reach a conclusion of not reportability or -- of
10 non-reportability, reach a conclusion that the matter
11 should be reported to HL&P, provide the notification in
12 the form of the completed deficiency evaluation report
13 to the HL&P engineering team or in accordance with that
14 pecking order to the IRC chairman ultimately. Or if the
15 ten-day, working day clock expires and they haven't
16 completed their evaluation, they call that a potential
17 reportable matter, then that's referred to the IRC. The
18 IRC still begins their 24-hour clock on a potential
19 reportability determination based on that input.

20 JUDGE BECHHOEFER: And in contrast, I
21 understand that Brown & Root had its own IRC; is that
22 not true?

23 THE WITNESS: That may very well be, sir. I'm
24 not familiar with the Brown & Root organization at all.

25 JUDGE BECHHOEFER: I see.

1 That's all we have, I guess.

2 Anything following up?

3 MR. SINKIN: No, nothing following up.

4 MR. GUTTERMAN: Applicants have nothing
5 further.

6 JUDGE BECHHOEFER: Does the Staff have
7 anything?

8 MR. REIS: No.

9 JUDGE BECHHOEFER: Mr. Wisenburg, you're
10 excused.

11 THE WITNESS: Thank you.

12 MR. GUTTERMAN: Mr. Robertson is standing by
13 waiting to testify.

14 MR. SINKIN: I would just as soon adjourn for
15 the day, Mr. Chairman.

16 MR. GUTTERMAN: Mr. Chairman, we've got an
17 hour and he's been sitting here all afternoon in the
18 closet not talking to anybody. Not to be taken
19 literally, but --

20 MR. SINKIN: Surely not a closet.

21 MR. GUTTERMAN: But having put him through all
22 this, I think we ought to at least make some use of this
23 time and of our hearing time.

24 JUDGE BECHHOEFER: I think we should start.

25 MR. SINKIN: Okay, we'll start.

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Can we take a short break?

JUDGE BECHHOEFER: Yes.

(Brief recess taken.)

(No hiatus.)

1 JUDGE BECHHOEFER: Back on the record.

2 MR. SINKIN: Yes, Mr. Chairman, at this time we
3 would call Mr. Cloin Robertson. Mr. Robertson has not
4 yet been sworn, Mr. Chairman.

5 Whereupon,

6 CLOIN ROBERTSON

7 was called as a witness on behalf of CCANP and, having
8 been duly sworn, was examined and testified upon his
9 oath as follows:

10 DIRECT EXAMINATION

11 By Mr. Sinkin:

12 Q Mr. Robertson, when were you first told that
13 you were to be sequestered as a witness?

14 A The morning of 16 July, I believe, it would an
15 Tuesday morning. If that's the right day, it was a
16 Tuesday morning.

17 Q And what were you told as to the conditions
18 imposed by sequestration?

19 A To read no newspaper articles, listen to know
20 television stories, discuss with anybody anything having
21 to do with the presentation of testimony at this
22 proceeding.

23 Q And did you observe those conditions?

24 A Yes, I have not read any or heard any or
25 discussed with anybody any matters concerning the

1 testimony in the proceedings.

2 In going through newspapers, of course, I have
3 seen headlines of articles but not read the articles.
4 And on one occasion, I read an article that had to do
5 with arguments among lawyers concerning admissibility of
6 evidence but nothing about any testimony that those
7 witnesses provided.

8 Q Those were the arguments regarding the
9 admissibility of Bechtel follow up studies to the Quadrex
10 report?

11 A Yes.

12 Q Did you ever read any of the prefiled testimony
13 in this proceeding?

14 A Yes.

15 Q Whose prefiled testimony did you read?

16 A I have read all of the prefiled testimony that
17 I'm aware of, at least that which was filed by the
18 deadlines that were imposed. If there's been testimony
19 filed since this proceeding has started, I haven't read
20 it.

21 Q When you say all of it, do you mean both by the
22 Applicants and the NRC?

23 A That's correct.

24 Q Have you read any of that testimony since July
25 16th?

1 A Yes.

2 Q Just prior to coming to Houston Lighting &
3 Power, were you at Stone & Webster?

4 A Yes, I was.

5 Q For how many years?

6 A Almost exactly four years.

7 Q Was Jerome Goldberg there at the same time?

8 A Yes, he was.

9 Q Did you work together?

10 A No.

11 Q Did Mr. Goldberg recruit you to come to HL&P?

12 A Not that I'm aware of. I was looking for
13 another challenge, and this opportunity presented itself
14 here in Houston, and I'm not aware that he had anything
15 to do with active recruiting of myself.

16 Q When did you join the staff of HL&P?

17 A March 20, 1981.

18 Q Had you ever worked for HL&P before?

19 A No.

20 Q And what was your position at the time you
21 joined HL&P?

22 A Manager of licensing.

23 Q And what were your responsibilities in that
24 position?

25 A To establish, organize, and oversee the

1 licensing department, which previous to March the 20th,
2 1981 did not exist.

3 Q By did not exist, do you mean did not exist as
4 a separate department?

5 A That's correct.

6 Q Licensing was part of nuclear services prior to
7 that?

8 A It was a section within nuclear services.

9 Q And at that time, who was your immediate
10 supervisor?

11 A Mr. Goldberg.

12 Q Between March 20th 1981 and May 8th, 1981, was
13 there any change in your position?

14 A No.

15 Q Was there any change in your responsibilities?

16 A No.

17 Q After joining HL&P in March of 1981 and prior
18 to May 8th 1981, had you ever initiated a review of a
19 potentially reportable item?

20 A Yes.

21 Q Can you describe to me that event?

22 A More than one.

23 Q Those events?

24 A The two that readily come to mind where I
25 recall three right offhand, right now, were all at Stone

1 & Webster.

2 Q I'm sorry, my question was between the time you
3 joined HL&P on March the 20th and May the 8th while you
4 were at HL&P in that period, did you ever initiate a
5 review of a potentially reportable item?

6 A Did I initiate one? I don't recall that I
7 initiated one, no.

8 Q In that same time period, had you participated
9 in making a notification decision pursuant to 50.55(e)?

10 A As manager of licensing, yes, in that I
11 reviewed the IRC findings sometime -- well, sometimes
12 prior to a meeting and always afterwards, to discuss with
13 the IRC chairman the basis under which they had reached
14 certain decisions, be they to report or not to report,
15 and concurred with those or did not concur with them as
16 the case may be.

17 Q In this period from March the 20th 1981 through
18 May the 8th 1981, on how many occasions did you review an
19 IRC decision?

20 A I have no recollection as to specific numbers.
21 I would suggest it was somewhere between a dozen and two
22 dozen, might have been more.

23 Q Let me be sure I'm being very clear in my
24 question. We're looking at a period that's perhaps seven
25 weeks long.

1 A That's right.

2 Q You are saying in that seven week period, there
3 were between a dozen and two dozen IRC meetings to review
4 potentially reportable findings?

5 A There were at least that many times when
6 matters were raised for IRC review, and needless to say
7 not all of those resulted in a decision that it was
8 potentially reportable or reportable. But there were
9 many items, continues to be many items, brought up to be
10 discussed by IRC, not all of which result in formal
11 meetings.

12 Q There were informal considerations by IRC at
13 times?

14 A Something would be brought to the attention of
15 the chairman, and he would relay that to me, we would
16 discuss it to determine whether or not there was
17 substance there to warrant an IRC meeting. And I am sure
18 that to some extent, that still exists.

19 Q Among those dozen or to dozen items, were there
20 items related to Brown & Root's design and engineering
21 program?

22 A There were items that cover a wide range. I
23 can't enumerate what they were at this point without
24 doing a lot of research, but they would cover everything
25 from construction activities to design activities.

1 Q In those items that would come up in the design
2 and engineering area, was the procedure to have
3 engineering do a review of the item before the IRC
4 considered the item?

5 A Not routinely. Normally, an item would be
6 brought up, sometimes it was discussed with me
7 beforehand; I don't want to leave the impression they all
8 were; they were not. And if there was reason to have an
9 IRC meeting, then that meeting would be held with
10 engineering representatives present as part of the IRC
11 team. I'm not aware of any specific evaluation that we
12 called upon HL&P engineering to do when we were aware of
13 a matter that we thought warranted IRC review.

14 Q So the IRC review would take place with
15 engineering personnel present to the respond to the item
16 and give the IRC a better view of what the what the item
17 might mean. Is that correct?

18 A Yes. Engineering had at least one
19 representative, QA had a representative, and depending on
20 what the issue was, there would be other people brought
21 in to that proceeding. It might be additional engineers,
22 it might be construction, it might be QA, but individuals
23 who would have direct and intimate knowledge of the
24 problem area that was being discussed.

25 Q When did you first become aware of the Quadrex

1 study?

2 A I don't know exactly. But it was sometime
3 shortly after I arrived, Dr. Sumpter informed me at one
4 point that there was an engineering review going on of
5 Brown & Root by the Quadrex Corporation and that's just
6 about the words he used and just about the extent of the
7 conversation.

8 Q Did you have any further conversation with Dr.
9 Sumpter or other personnel about the Quadrex study prior
10 to your attending the April 13th briefing by Quadrex?

11 A No.

12 Q But you did attend the April 13th briefing that
13 Quadrex held?

14 A Yes, I did.

15 MR. SINKIN: Can you help me with my next
16 exhibit number?

17 MR. AXELRAD: April 13th.

18 MR. SINKIN: No, my next exhibit number.

19 JUDGE BECHHOEFER: 127.

20 MR. SINKIN: 127, thank you.

21 JUDGE BECHHOEFER: That's what I have, is 126.

22 Is that your last one?

23 MR. SINKIN: Yes.

24 Q (By Mr. Sinkin) I'm going to show you what I
25 have asked be marked as CCANP 127 and ask you if these

1 are your notes of that April 13th meeting.

2 (CCANP Exhibit No. 127 marked
3 for identification.)

4 A Yes, those are my notes of that meeting.

5 Q (By Mr. Sinkin) Referring to the second item
6 under April 13, "computer code verification - not done."
7 Did Quadrex say at that briefing that Brown & Root was
8 not verifying their computer codes?

9 A I don't recall their briefing in that fashion.
10 They were describing their review and its status, and
11 indicated that there, that they, Quadrex, were finding
12 some difficulty in understanding what the status of the
13 Brown & Root computer code verification was, but that
14 they thought there was a possibility that not all of them
15 had been verified.

16 Q Can you tell me what the next line in your
17 notes is meant to convey?

18 A No. When copies of this were made I looked at
19 it and I couldn't figure it out then either.

20 Q I was wondering if perhaps it was a military
21 term, was there a commanding officer or something, but I
22 wasn't sure either.

23 A I don't know.

24 Q The next -- the item below the next item,
25 outside containment pipe break item, did Quadrex say at

1 that briefing that Brown & Root did not understand the
2 process for analyzing pipe break outside containment?

3 A No, I don't recall it that way. As I recall,
4 Quadrex said that the pipe break outside containment had
5 not be done.

6 Q They simply said it had not been done, they
7 didn't go on to say that it was not done because Brown &
8 Root did not understand that they needed to do it?

9 A Yes, there were words by Quadrex saying that
10 the people they talked to did not seem to understand the
11 necessity to do some of the pipe break outside
12 containment that they asked them about.

13 Q Turning to the next page, under nuclear
14 analysis, the third item, what did Quadrex tell HL&P on
15 April 13th about Brown & Root not assigning analysis
16 responsibility among Brown & Root groups?

17 A As I recall it, Quadrex said they could not
18 find a plan that identified which analyses would be the
19 responsibility of which groups among Brown & Root. They
20 could not find an overall plan for such analyses.

21 Q Were there particular analyses that they were
22 concerned about as to who had responsibility?

23 A As I recall it, Quadrex said that there was
24 some, I'll use the word indecision because I don't
25 remember exactly what Quadrex said, but I -- my mind

1 translates it to that term, there was some indecision
2 among the discipline people they talked to as to who was
3 responsible for certain types of analyses. And I don't
4 recall which ones they were in particular. But that
5 there was some uncertainty as to who was really
6 responsible for a particular type of analyses.

7 Q You have the Quadrex report in front of you?

8 A Yes, I believe I do.

9 Q If you will turn to Page 3-2, I just want to
10 see if this might refresh your memory. The second
11 paragraph talks about assigned responsibilities in two
12 different contexts. If you would just review that for a
13 moment.

14 Does this refresh your memory at all as to
15 whether Quadrex on April 13th mentioned specifically
16 responsibility for systems engineering?

17 A I cannot recall in particular which items they
18 may have mentioned. I can't recall it.

19 Q Okay. Referring to the last line on that page,
20 under engineering evaluation, it says some material
21 delivered under table. Do you recall what that referred
22 to? We're back into the notes now.

23 A Yes. Quadrex simply stated that on some
24 occasions, they had been provided material that was --
25 that did not come through official channels, and as I

1 recall it, they were talking about the Brown & Root
2 engineers were trying to be very cooperative. And that
3 upon occasion, they received material that did not come
4 through any formal transmittal or official turnover.

5 Q The phrasing of that item suggests to me that
6 what was happening was Brown & Root engineers were
7 bringing to Quadrex material they felt Quadrex should see
8 that might not come to them through the formal process.
9 Is that the impression Quadrex gave you?

10 A I don't know that I got that type of impression
11 as much as it was simply that Quadrex would ask a
12 question and they would receive documents, material, and
13 then on occasion, that would get supplemented later by
14 engineers from that group responsible for that who would
15 give them additional material that was not a part of what
16 I would classify as a formal turn over.

17 Q On the fourth page of your notes, if I'm
18 reading that correctly at the top, that would be Mr. Wray
19 of Quadrex Corporation making comments?

20 A That's correct.

21 Q And he made comments after Mr. Stanley had
22 delivered the actual report; is that the way it went?

23 A Mr. Stanley made the presentation of material
24 during the day, he did not give us a report, a formal
25 report or even copies of anything; but after he finished

1 his presentation, Mr. Wray made some summary comments,
2 and these are my notes of his comments.

3 Q And was it your understanding that Mr. Wray was
4 Mr. Stanley's supervisor?

5 A That's correct.

6 Q Referring to item four, Mr. Wray's comments,
7 what did Mr. Wray say about HL&P inserting itself into
8 engineering released to construction?

9 A I don't recall specifically what he said. I
10 take this note to be his recommendation that he made at
11 that point saying that HL&P should put itself in the loop
12 of the engineering release to construction so that HL&P
13 would be in a better position to know what engineering
14 was producing and what was going to the field for work.

15 I believe his idea was HL&P would thereby be
16 more knowledgeable about the production of engineering
17 material and be in a better position to cause engineering
18 to support construction in a way that would be better for
19 construction progress.

20 Q The idea as you remember it did not include
21 HL&P actually verifying Brown & Root's design work?

22 A No had nothing to do with that, I'm sure.

23 Q The next section on that page, the first Item
24 No. 2, what recommendation was made as to how Brown &
25 Root should extend the engineering review?

1 A I believe this was a part of the
2 recommendation.

3 Q I'm sorry, I didn't hear you.

4 A I said I believe this was part of Mr. Wray's
5 recommendations that was suggesting that Brown & Root
6 engineering should do a more comprehensive review of
7 there material when it was going to the field to ensure
8 that it was completed in sufficient detail that when
9 construction built something, later holds -- I mean holds
10 that were on the documents would not result in later
11 construction rework.

12 If my memory serves me right, he was concerned
13 that the pressure of construction on engineering was
14 causing them to send material to the field in shall we
15 say bits and pieces, or documents that had portions of it
16 ready for construction and large amount of hold on
17 particular drawings.

18 Q Are you saying hold, h-o-l-d?

19 A Yes. Then when those matters were finished and
20 designed, they sometimes resulted in changes that caused
21 rework of what had already be sent down and done. And he
22 was looking at a more efficient process, to prevent the
23 rework process.

24 MR. SINKIN: Mr. Chairman, I would move CCANP
25 127 which is a four page document -- no, wait a minute, a

1 three page document, composed of handwritten notes into
2 evidence at this time.

3 MR. GUTTERMAN: Applicants have no objection.

4 MR. REIS: Staff has no objection.

5 JUDGE BECHHOEFER: CCANP 127 will be admitted
6 into evidence.

7 (CCANP Exhibit No. 127
8 received in evidence.)

9 Q (By Mr. Sinkin) After the April 13th meeting,
10 did you and Mr. Goldberg discuss the potential for
11 50.55(e) reports resulting from the Quadrex review?

12 A Yes.

13 Q And when did that discussion take place?

14 A I don't know the exact date, but it was
15 sometime prior to the 7th of May.

16 Q Let's see if we can pin it down. There was a
17 further Quadrex briefing on April the 30th.

18 A That's correct.

19 Q Was it before that briefing that you had the
20 discussion?

21 A I really don't know.

22 Q Okay.

23 A It could have occurred in bits and pieces over
24 several occasions. We were both in the same office
25 building and I saw him practically every day that he was

1 there and I was there. So it could have occurred on more
2 than one occasion.

3 Q Had you come out of the April 13th meeting with
4 a sense that there would be 50.55(e) reports resulting
5 from Quadrex?

6 A I think my impression after the 13th April
7 meeting was that there probably would be.

8 Q And did Mr. Goldberg share that perception?

9 MR. GUTTERMAN: Objection, that calls for
10 speculation on the part of --

11 Q (By Mr. Sinkin) Did Mr. Goldberg communicate
12 to you that he also thought there might be -- there
13 probably would be 50.55(e) reports out of the Quadrex
14 review?

15 A In an indirect fashion, I was present when he
16 called Mr. Don Sells and informed Mr. Sells that we had
17 this report coming to us in a relatively near future, and
18 that he expected that we might have some potential
19 reportable items result from a review of that report.

20 Q Do you know the date of that telephone call?

21 A No, I don't. It was again between 13 April and
22 7 May, but just when I don't know.

23 Q From the April 13th meeting, which particular
24 items seem to you most likely to lead to 50.55(e)
25 reports?

1 A I thought the potential was there for the
2 computer code situation to become that, if Quadrex could
3 identify, in its report, a factual basis for what they
4 very briefly described on the 13th of April as being a
5 possibility I guess is the way of saying it, they --
6 their characterization of the status of computer code
7 verification was rather vague, in that they were looking
8 at it, they weren't sure just what status the computer
9 codes were actually in at that point in time, and they
10 were still proceeding with their review and sorting out
11 the facts among their staff to see just what it was.

12 And at that meeting, the point was made to
13 Quadrex to look at it carefully and document it well
14 because this, in our view, represents an important matter
15 and we want to know just exactly what the status of the
16 computer code verification effort is.

17 In essence, we said, "What you've told us today
18 is not enough; if you don't have any more than what you
19 told us today, go back and do some more."

20 Q Did the problem of the analysis of pipe break
21 outside containment suggest to you a potential 50.55(e)
22 report in terms of equipment outside containment that
23 might not be properly qualified?

24 A No, not at that point. The other item that
25 struck me was their characterization of the nuclear

1 analysis group as having problems and that's really the
2 way they said it. And that struck me as being a
3 significant item. And so I was looking at that one as
4 beings an area that would require close, a close look
5 when we got the report.

6 Q Did they say anything in more detail what kind
7 of problems they perceived nuclear analysis having?

8 A As I recall, they said they could find very few
9 valid analyses in place that had been performed by the
10 Brown & Root nuclear analysis group. The group seemed to
11 have problems in supporting the project. And I took
12 their context to refer to production problems.

13 Q But at the same time, this was an area that you
14 thought you should look at closely regarding 50.55(e)?

15 A Well, any time you hear that a group has
16 trouble producing product, then the next question that
17 comes to mind is what have they produced and what shape
18 is it in. And that's what was going through my head
19 at that point was: What am I going to
20 find when I look at what they've already done?

21 Q And Quadrex did communicate that some of what
22 they had already done was not valid. I think that was
23 the term you used earlier, that there were very few valid
24 analyses?

25 A They said that there were very few valid

1 analyses in place. That very little had been done since
2 the PSAR stage, and a number of analyses that had been
3 performed had been invalidated by Brown & Root and were
4 no longer valid, that is analyses that had been started
5 after that time period had -- they didn't give reasons,
6 they just said they had been stopped and invalidated.

7 (No hiatus.)
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1 Q Other than those two items, anything else on
2 the April 13th meeting that suggested to you there might
3 be 50.55(e) reports?

4 A Not that I recall at this point. There could
5 have been at that time period other things registered in
6 that fashion, but at this time I can't recall anything
7 else.

8 Q And what did you and Mr. Goldberg decide to do
9 about the fact that there might well be these reports?

10 A We decided that there were two things that
11 needed to be done. One was to have Brown & Root be
12 prepared and to review this report very rapidly after it
13 arrived and give us their evaluation relative to
14 reportability. And, secondly, that we should prepare
15 ourselves to undertake a rapid review of the report in
16 essentially the same time frame that Brown & Root would
17 be also reviewing the report.

18 Q At this time were you aware of the 50.55(e)
19 guidance that had been issued by the Nuclear Regulatory
20 Commission in April of 1980?

21 A Yes.

22 Q Are you aware that that guidance does provide
23 that, if necessary, up to fourteen days could be used to
24 evaluate potential reportable findings, but that at that
25 point when you decided it was potentially reportable,

1 then the 24 hours would be triggered?

2 A Yes.

3 Q Was there any discussion between you and Mr.
4 Goldberg about whether that fourteen-day period should
5 be used in this particular instance?

6 A No.

7 Q Was there any particular reason that Mr.
8 Goldberg communicated to you or that you suggested to
9 him that this review process should be done in that
10 immediate 24 hours?

11 A Well, it is not -- that point certainly was
12 not clear to me just what the reference to fourteen days
13 in that guidance applied to. But it was very clear to
14 me as I interpret that guidance, that within
15 approximately 24 hours of the time a responsible
16 individual had enough information to determine that
17 there was a serious problem that seemed to meet the
18 criteria of 50.55(e), that within that period of time
19 our region expected to be notified of that fact.

20 So, I did not contemplate using a fourteen-day
21 period to evaluate the report during that time frame
22 personally.

23 JUDGE BECHHOEFER: Mr. Sinkin --

24 MR. SINKIN: This is a good --

25 JUDGE BECHHOEFER: -- anytime you get to a

1 good breaking point.

2 MR. SINKIN: This is a very good breaking
3 point.

4 JUDGE BECHHOEFER: I think at this point we'll
5 adjourn until tomorrow.

6 Mr. Robertson, you're still under the
7 sequestration order.

8 We'll be back at 9:00 o'clock tomorrow
9 morning.

10 (Hearing recessed at 6:04 p.m.)

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CERTIFICATE OF OFFICIAL REPORTERS

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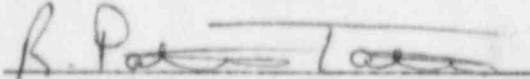
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R. Patrick Tate, CSR


Susan R. Goldstein, CSR

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