

Records Facilities Branch (3)
016 Phil

COMMISSION

IN THE MATTER OF:

CAROLINA POWER AND LIGHT COMPANY

(Shearon Harris Nuclear Power Plant,
Units 1, 2, 3, and 4)

Docket Nos. 50-400
50-401
50-402
50-403

Place - Raleigh, North Carolina

Date - 28 February 1979

Pages 2362 - 2621

7903080539

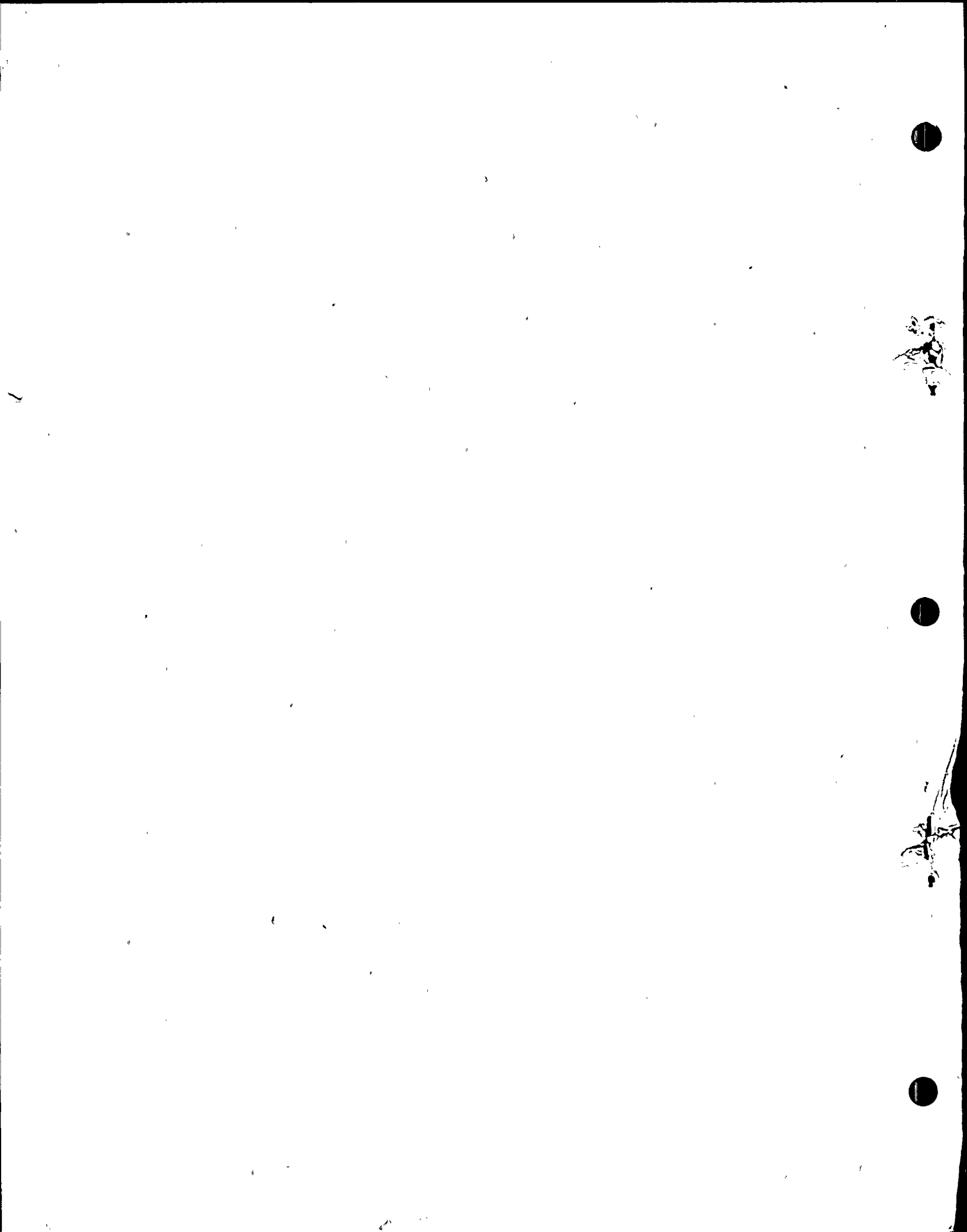
Telephone:
(202) 347-3700

ACE - FEDERAL REPORTERS, INC.

Official Reporters

444 North Capitol Street
Washington, D.C. 20001

NATIONWIDE COVERAGE - DAILY



WB

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

In the matter of:

CAROLINA POWER AND LIGHT COMPANY

(Shearon Harris Nuclear Power Plant,
Units 1, 2, 3, and 4)

: Docket Nos. 50-400
: 50-401
: 50-402
: 50-403
:

Courtroom 2,
Federal Building,
310 New Bern Avenue,
Raleigh, North Carolina.

Wednesday, February 28, 1979.

The hearing in the above-entitled matter was reconvened, pursuant to adjournment, at 9:00 a.m.

BEFORE:

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

DR. J. VERN LEEDS, Esq., Member.

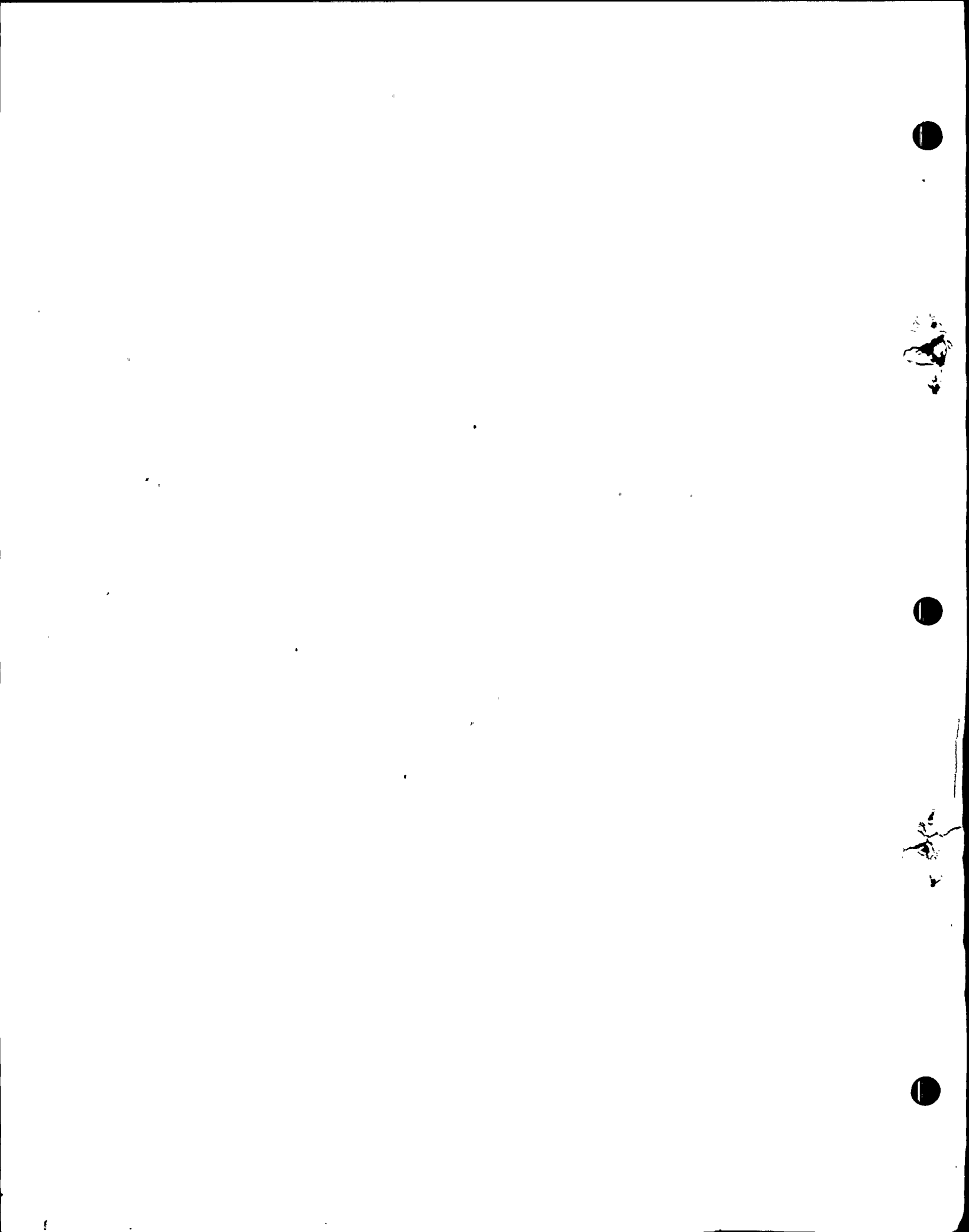
GLENN J. BRIGHT, Member.

APPEARANCES:

On behalf of the Applicant:

GEORGE F. TROWBRIDGE, Esq. and JOHN H. O'NEILL, JR.,
Esq., Shaw, Pittman, Potts and Trowbridge,
1800 M. Street, N.W., Washington, D.C. 20036.

RICHARD E. JONES, Esq., Associate General Counsel,
Carolina Power and Light Company.



wb

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

On behalf of the NRC Regulatory Staff:

EDWIN J. REIS, Esq., Office of the Executive
Legal Director, Washington, D. C.

On behalf of the Attorney General of North Carolina:

DENNIS P. MYERS, Esq. and DAVID GORDON, Esq.,
Office of the Attorney General, Raleigh,
North Carolina.

On behalf of the Conservation Council and Wake
Environment, Inc.

THOMAS S. ERWIN, Esq., Water Tower Court,
115 W. Morgan Street, Raleigh, North Carolina
27602.



2/28/79

2364

wb

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

C O N T E N T S

Limited Appearance Statement

Page

Wells Eddelman

2381

Wells Eddelman

2519

Witnesses

Direct

Cross

Re-direct

Re-cross

Board

Charles E. Murphy)

2413

Virgil L. Brownlee)

2498

2507

Francis J. Long)

Hugh C. Dance)

(Continued))

Charles E. Murphy)

2536

2540

Virgil L. Brownlee)

Charles McFarland)

Allan Hardt)

Jack Bryant)

Exhibits

Iden. Evi.

Board 9 Inspector & Auditor Report, 11/78, Vol 1.

2452

2452

Board 10 " Vol 2.

2452

2452

Board 11 " Vol 3.

2452

2452

Staff 16 Chronology of inspections at Brunswick

2497

Staff 17 Murphy memo for Reactor Const. and Eng.

2538

2538

Support Branch staff, 10/3/78

WRBloom
eblP R O C E E D I N G S

1
2 CHAIRMAN SMITH: Ladies and gentlemen, we've been
3 knocked out of the jury room where we had set up our office
4 so we don't have all the records necessary to proceed with
5 the evidentiary hearing, so we'll take advantage of this time
6 to attend to the limited appearance statements.

7 As indicated yesterday, we would receive and
8 consider written limited appearance statements and we have
9 received several. Mr. Wells Eddelman submitted a large group
10 of them. Some of them are signed by him; some are not. They
11 all appear to be from him.

12 They are divided into discrete subjects. One
13 is entitled "Browns Ferry," which has no relevance to this
14 hearing. One is entitled "Money Talks," beginning "CPA
15 has millions and millions of dollars," has no relevance to
16 this hearing.

17 One is entitled "Nuclear Turnabout," referring
18 to nuclear engineer Kent Hansen, which has no relevance to
19 this hearing.

20 One begins:

21 "If low-level radiation coming out
22 of nuclear power plants is so safe, why are all
23 these scientists (Morgan, Rotblatt, et cetera)
24 saying it is not safe."

25 It has no relevance to the proceeding.

eb2

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

One is entitled "Nuclear Waste." I see no relevance.

One begins, "I believe my pocketbook is in danger from nuclear power." It has no relevance.

Another one begins, "Why does government cover up the problems with nuclear power, why did they cut off the research money whenever scientists show radiation dangers?" And this refers to, I believe, Mancuso and Gross and Bertell. It has no relevance to the proceeding.

One from Mr. Eddelman begins "How much is your life worth," and he discusses \$170,000, and Dr. Morgan, and has no relevance.

One is entitled "Unsafe Nukes." It begins:

"There are two other nuclear power plants you should know about. One is North Anna, Virginia. The other one is Calloway."

No relevance.

The next one begins:

"If CP&L is such a safe company, why did they hire Research Cottrell to build their cooling towers right after one of them collapsed in West Virginia...."

It has possible relevance. I will read it into the record.

"If CP&L is such a safe company, why

eb3

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

did they hire Research Cottrell to build their cooling towers right after one of them collapsed in West Virginia and killed 51 construction workers? They announced the contract the same week those 51 men were being buried in The Raleigh News and Observer.

"Reports are that CP&L is building the Shearon Harris Plant as fast as possible. That's what killed those 51 people, rushing to get that tower up too soon. Research Cottrell was cited for 10 safety violations in their West Virginia disaster.

Is it safe...."

underlined, emphasized --

"....safe to hire them for the Harris Plant?"

That has conceivable relevance to management.

The next statement from Mr. Eddelman begins:

"Now that the NRC has junked the Rasmussen Report, 'Guesses on Nuclear Risks,' what evidence do you have that nuclear power is safe?"

No relevance to our proceeding.

The other one is "Pipe Cracks," beginning, "There is a disturbing report on pipe cracks in nuclear reactors," quoting an article from Critical Mass, and it refers to a crack in the pipe at Brunswick reactor. It has no direct relevance to our proceeding. However, the Board has read



eb4

1 the entire segment and it will be made available to the
2 parties.

3 The next one from Mr. Eddelman-- Incidentally,
4 these are on different pieces of paper and different pens.
5 They all appear to be from Mr. Eddelman, and they have simi-
6 lar printing.

7 One begins:

8 "How do people know what experts to
9 believe when the power company experts say one
10 thing and the anti-nuclear experts say the oppo-
11 site?"

12 We've reviewed this and we see no relevance to
13 our proceeding. It refers to growth rate and matters that are
14 not clearly identifiable to relevance to management.

15 The final one, which we don't believe is relevant,
16 begins:

17 "Can you tell me what is acceptable
18 safety for nuclear power plants? CP&L have the most
19 problems reported at their Brunswick Plant of any
20 two boiling water reactors in the nation in 1977.
21 Is that acceptable?"

22 I think perhaps we had better read this.

23 "Is there any truth to the story that
24 CP&L buys all the milk from a dairy near the plant
25 and dumps it out on the ground because it's not



Handwritten scribbles or marks.



Handwritten scribbles or marks.



ab5

1 safe to drink? Is CP&L letting more radioactive gas
2 out of its smokestack than is safe? How much damage
3 do they have to do before the NRC makes them clean
4 it up, or have they made over 500 dumpings of radio-
5 active liquid waste from the H. B. Robinson plant?

6 "Does diluting nuclear waste make it
7 safer or just harder to see the damage it's doing?
8 Is it safe management when you have all these prob-
9 lems with nuclear safety and nuclear waste?"

10 A final statement from Mr. Eddelman was believed
11 by the Board to be relevant to the remanded issues, and it's
12 this statement.

13 "Why have so many people been quitting
14 CP&L nuclear jobs? Why do they only have two
15 college graduates in their Radiation Protection
16 Division? Why were they working people 50 or 60
17 hours seven days a week for years? Why can't they
18 keep radiation technicians? Are the four people
19 who resigned from CP&L nuclear plants going to
20 testify here? Why did they quit?

21 "Why is CP&L's radiation protection
22 program still inadequate? Why hasn't NRC made them
23 fix it? Why is their quality control so bad? Why
24 don't they have an evacuation plan for their
25 Robinson Nuclear Plant? It's been operating eight

eb6 1 years. Isn't that enough time to plan an evacuation?

2 "I want to know if these questions will
3 be answered in these hearings. I want to know how
4 bad CP&L's record has to get before the NRC does
5 something about it."

6 That we think has clear relevance.

7 Now the other statements will be accumulated and
8 at the end of the hearing we will caused them to be served
9 upon the parties and on the public record and in the Public
10 Document Rooms.

11 This is also true of a statement of Mr. Wells
12 Eddelman who states that he observed me read a full page of
13 his written statement in five seconds and another full page
14 at a glance and decide that it's all irrelevant, which is a
15 misunderstanding of what I said.

16 We have other statements from other members of the
17 public. We have one from William F. Baker of Chapel Hill,
18 North Carolina, who has made a relevant statement. He says:

19 "Is Carolina Power and Light Company's
20 management and staff infallible? How can the public
21 be assured that the Shearon Harris Nuclear Power
22 Plant will operate at zero defects?"

23 There's another statement, an anonymous statement,
24 which has no clear relevance. It draws a parallel between
25 the Titanic and nuclear safety, the Titanic being unsinkable

eb7

1 and nuclear safety unbreakable.

2 Melanie Sheller presented a statement and she
3 wants to know to whom should she appeal the facist attitude
4 on the Board's part.

5 Another anonymous statement which might have
6 relevance:

7 "How can this hearing honestly con-
8 sider whether or not Carolina Power and Light can
9 manage a safe nuclear power plant when this is
10 assuming the plant is safe or, at the least,
11 reasonably safe? Are you not also deciding what is
12 reasonably safe? I believe you must first decide
13 what is reasonably safe."

14 From -- it looks like Julie, J-u-l-i-e, K-a-i-m-i,
15 it could be K-a-i-r-m-i, the statement is:

16 "Dear Sirs:

17 "How can any one of you guarantee...."
18 emphasizing the word "guarantee" --

19 "...the capability of management of the plant that
20 endangers the lives of thousands of people for a
21 time period of 1,000 years or more, the life span
22 of many of the products and byproducts that are the
23 responsibility of that plant?"

24 There's a written statement from David Graham
25 who seems to be from North Carolina, C-a-r-r-l-o-r-o, or

eb8

1 perhaps it is b-o-r-o, but it's not legible. He says:

2 "To the Atomic Safety and Regulation
3 Committee:

4 "It is with great disappointment that
5 I find my input as a citizen of North Carolina is
6 limited to a written statement and further limited
7 to a not-yet-defined narrow-issue orientation. Be
8 that as it may, I do have something to say in re-
9 gard to 'management efficiency.'

10 "It seems to me that the criteria for
11 judging safe and efficient management must be
12 seen in regards to the reference for protecting
13 citizens from dangerous nuclear wastes. How can I
14 believe that management is efficient and can make
15 sure that me and my children will be protected from
16 those wastes for the thousands of years necessary
17 when the very jurisdiction of this federal proceed-
18 ing has a history of a mere 200 years?

19 "Any management that ignores this his-
20 torical time frame is irresponsible."

21 A statement from Claudia Toomin, or it could be
22 Loomin, L-o-o-m-i-n, of 714-C Shepherd Street, Durham, North
23 Carolina. Ms. Loomin states:

24 "I do not believe that CP&E or any other
25 body of humans is sufficiently well staffed to safely

eb9

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

manage anything so dangerous as a nuclear power plant. The only experiment that would prove such capability is actually running of the plant by the company involved, employing the particular people who will be running the plant. Such an experiment is a dangerous one, involving human lives, and many unconsenting ones at that.

"Such experiments have been outlawed in this country on a smaller scale if not on this sort of grand scale. In any case, they are immoral and I for one am not willing to allow experimentation of this kind to occur in my virtual background.

"P. S. I would appreciate night nearings."

And finally, one from Lynn Pierce:

"I, Lynn Pierce, writing as a mother and neighbor of the Shearon Harris Nuke Power Plant, wish to express my concern for the safety of my family and neighbors. In the past, too many accidents of incredible measure have taken place. This is undeniable.

"You have the responsibility to the people of this area to uphold our right to a clean, healthy life. Please put yourself in our position and reconsider this matter. I hope you will be

eb10

1 guided in making the right decision and may God help
2 you if you're wrong.

3 . "Thank you for your consideration."

4 Each of these, as I stated, will be served upon
5 the parties and placed in the Public Document Room.

6 Yesterday we started through the counsel table--

7 Mr. Reiss?

8 MR. REISS: Mr. Chairman; I want to go on the
9 record and state that it is the position of the Staff that
10 generally public appearances from the public should be heard.
11 I think by reading them we have heard them. However, it's
12 generally-- I know you have denied motions for reconsideration
13 but you did not ask for the parties to express their opinions
14 on whether there should have been public appearances and
15 public appearance statements.

16 On behalf of the Staff, I want to make a motion
17 and have it recorded in the record that we ask for recon-
18 sideration of your ruling, that there be an allowance for
19 short public appearance statements.

20 CHAIRMAN SMITH: Are you making an affirmative
21 motion that we have short public appearance statements?

22 MR. REISS: Yes.

23 CHAIRMAN SMITH: Okay. I might note, however,
24 there has been opportunity throughout yesterday's hearing
25 for this motion to be made. There was an opportunity before

.ebll

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

we ever began for procedural motions, and you are very late because hardly anybody is in this room now who can make a statement.

Mr. Eddelman happens to be present, however.

MR. REIS: Well, my thought was that perhaps you could announce that they would be taken in short period at the beginning of tomorrow's session, so that Mr. Eddelman or any other observers here could give notice to those that we would take short public appearance statements, or that you would take short public appearance statements.

la

WRB/wb1 1 CHAIRMAN SMITH: Do you have any advice as to
2 how this Board might limit the time of the public appearance
3 statements?

4 MR. REIS: As it has been done on many other
5 Boards, I would say set a total time of perhaps at a maximum
6 two hours, and then set an individual time of five minutes
7 per person and tell them anything further they want to submit
8 should be in writing. That has been done many times.

9 CHAIRMAN SMITH: I'm aware of that procedure.
10 My question wasn't exactly that.

11 So that's the totality of your advice?

12 MR. REIS: Yes, sir.

13 MR. ERWIN: Mr. Chairman, I would like to add the
14 name of the intervenors to that motion. And I'd like to
15 make a comment.

16 I don't believe we had an opportunity yesterday
17 before the Board's ruling on the limited appearances to say
18 much about them. And I would say that, while I do not repre-
19 sent any of the individuals that attempted to make, or
20 sought to make limited appearances yesterday, I should say
21 that it would not surprise me that none of them would appear
22 today in light of the Board's action yesterday.

23 CHAIRMAN SMITH: Do you have any comments,
24 Mr. Jones or Mr. Trowbridge?

25 MR. TROWBRIDGE: Mr. Chairman, in our view the

wb2

1 Board was correct in its decision to receive written state-
2 ments to determine their possible relevancy to this proceed-
3 ing, to the scope of this proceeding, and to exclude those
4 limited appearance statements which have no relevancy to the
5 scope of the proceeding. I think the Board acted properly
6 and wisely in that respect.

7 We would have no problem with a limited appear-
8 ance or an oral statement for those few statements that the
9 Board did find of possible relevance to this proceeding.
10 However, the Board has read them. And it's not clear to me
11 that further oral statements would be useful. We would have
12 no objection, however.

13 CHAIRMAN SMITH: Mr. Reis, does your motion
14 anticipate that the Board would permit limited appearance
15 statements on any subject, or subjects pertaining to the
16 remanded issues?

17 MR. REIS: It would be subjects pertaining to the
18 remanded issue.

19 CHAIRMAN SMITH: Do you have any advice to us
20 as to how we can limit the oral appearances to those issues?

21 MR. REIS: I would say that with a caution to those
22 who would get up, with a firm time requirements, that some
23 limitation could be made. I would think that saying to those
24 who get up that what will be considered will be those state-
25 ments relevant to the issues before this Board, and indicating

wb3

1 to them that there is only a limited time to address those
2 issues, we could have some limitation and perhaps get some
3 relevant statements.

4 Mr. Chairman,--

5 CHAIRMAN SMITH: Will you excuse me, Mr. Reis?

6 (The Board conferring.)

7 DR. LEEDS: I would like to make a comment while
8 the Chairman is conferring.

9 I would expect that any time an attorney has
10 anything to say, that he would try to make his presence known
11 and stand up. And I don't think I've seen in the past any
12 reluctance on anybody's part to stop us from anything.

13 So I would hope you would not be reluctant, if
14 you were reluctant yesterday and didn't want to stop our
15 proceedings, that you would take the opportunity to stand up
16 and stop us when you think it's appropriate, to make a motion
17 or whatever.

18 CHAIRMAN SMITH: The Board, acting upon the
19 Staff's motion and the Intervenor's motion, has also recalled
20 that in the course of Mr. Eddelman's petition for leave to
21 intervene the parties suggested that the suitable alternative
22 to intervention for Mr. Eddelman might be the opportunity
23 to make a limited appearance statement. He has demonstrated
24 enduring interest in the proceeding, he's been here all along
25 and he's present today. And the Board has decided with respect

wb4

1 to Mr. Eddelman at least, we're going to permit him to make
2 a limited appearance statement.

3 Furthermore, we want to remind the parties, and
4 you, Mr. Reis, that our ruling yesterday was that an applica-
5 tion for an oral statement could be made. However we wanted
6 some assurance in advance that the person making the oral
7 statement understood the range of the issues on which they
8 could be heard. And it wasn't until later that we had an
9 opportunity to view these statements.

10 Now if there is anybody present in this hearing
11 room whose statements we've read who would like to read them
12 or restate them orally, you're welcome to do it.

13 Unfortunately, Mr. Reis, we have to give priority
14 in this proceeding to the very important business of the
15 evidence. And, necessarily, as much as we would like to hear
16 from the public we do have to consider the needs of the
17 evidentiary record as paramount.

18 Mr. Eddelman, would you care to make your statement,
19 sir?

20 MR. EDDELMAN: Are you asking me if I will read
21 what you read?

22 CHAIRMAN SMITH: I'm saying you can do whatever
23 you wish to do. You can make a limited appearance statement.
24 I'll give you back your papers if you want to use them for
25 notes.

wb5

1 There are two restrictions, however, one is that
2 you limit your statement to the issues on the remanded hear-
3 ing as we described them -- and you were present when we did
4 that, and the other that you limit your statement to ten
5 minutes.

6 MR. EDDELMAN: Mr. Smith, if you will please
7 repeat what your understanding of the limitation of those
8 issues is I will accept your offer.

9 CHAIRMAN SMITH: Well, sir, we've repeated that
10 several times. But let me read to you the language of the
11 Commission.

12 MR. EDDELMAN: If you're going to read the Com-
13 mission language, my understanding of it is different from
14 yours, particularly in the matter of release of radiation.
15 Is radiation release relevant to this?

16 CHAIRMAN SMITH: If it has a causal relationship
17 to the management capacity of Carolina Power and Light to
18 construct and operate Shearon Harris.

19 What I recommend you do, Mr. Eddelman, is to
20 proceed with your statement. I think you understand what the
21 hearing is about. It may very well be that you may wander
22 afield, and I'm sure Mr. Reis will rise to bring you back
23 into the scope of the remanded issues.

24 We'll call upon you to do that. Mr. Eddelman,
25 the floor is yours.

wb6

1 Mr. Reis, would you also be the timekeeper and
2 bring to our attention when you believe the time has
3 expired?

4 Please come forward.

5 LIMITED APPEARANCE STATEMENT OF WELLS EDDELMAN

6 MR. EDDELMAN: Having seen what's going on in
7 these hearings yesterday -- and I should point out I have
8 read all the Staff submissions for this: I think I'm the
9 only nuclear opponent in the room that's read all of this
10 stuff. In fact I don't know if anybody else has read all of
11 it. I was impressed by the amount of contradictions that
12 there are in the testimony of some of these gentlemen and the
13 facility with which they try to juggle them.

14 I'd like to ask the Board to investigate further
15 some of these assertions. For example, that CP&L doesn't have
16 any problems. But we have to have a meeting every year
17 to discuss their problems. We discussed the six problem
18 areas with them. But there was no change between the time we
19 testified that they didn't really have any significant prob-
20 lems and the time in which we had to discuss all these problems
21 with them.

22 It seems to me that that's ridiculous. And they
23 could explain themselves a little bit better on that and
24 perhaps clear this up.

25 I'd also like to know how it is that they can say

wb7

1 that CP&L is engaged in safe management when their management
2 errors, quality assurance, and so on, is well documented in
3 Howard Wilber's statement, and his prefiled testimony says
4 that they blew up their offgas system due to operator errors,
5 quality assurance errors and other errors. They blew it up
6 three years ago and now they estimate it will take eight
7 more years to fix.

8 And do you know what the NRC is proposing to do
9 with this? They propose to change the technical specs
10 so that this system is not required to operate until they
11 get it fixed. I don't think that's good protection of the
12 public; in fact I think that is mal-protection of the public.

13 They've got a release rate on there, and it's
14 in these documents. If you look back in the appendices to,
15 I think it is Wilber's again, you'll see release rates of
16 13 to 19 thousand microcuries a second. Now without knowing
17 what the radiation is you can't tell too much about it.
18 But it's probably mostly noble gases and iodine and some other
19 nasty stuff, none of which I particularly want to be breathing.
20 And if you multiply these microcuries per second by the
21 31.5 million seconds in a year you get between 400 thousand
22 and 600 thousand curies a year up the stack.

23 Now one of the worst violators of NRC regulations
24 is the Zion plant in Illinois which is putting out almost
25 exactly the same amount, according to reports I've read. And

abl
fls wb7

1 I want to know how it is safe management for CP&L to get up
2 there and say "We're safe," and for all these gentlemen to
3 say "They're safe," when they can blow the system up and not
4 be able to fix it for 11 years and be releasing radiation
5 like this. I think it's atrocious.

6 How much time have I got?

7 MR. REIS: About seven minutes more.

8 MR. EDDELMAN: Okay.

9 Another thing that I'm sort of curious about,
10 these gentlemen seem to believe-- They are supposedly the
11 experts here. They certainly seem to know more about it than
12 I do, although they don't seem to be able to express them-
13 selves clearly a lot of times.

14 What I'd like to know is if they can't, on the
15 basis of their data, compare any two licensees, how can they
16 have any confidence in their assessment about one licensee?
17 How can they say that one plant is safe if they can't tell
18 whether one plant is safer than another? If you can't judge
19 safety, how are you able to assert that CP&L can operate
20 plants safely?

21 Let's see. I would also like to know how it's
22 sound financial responsibility, as brought up yesterday,
23 that CP&L had the plant three percent complete, and in CP&L's
24 prefilled testimony they say they've got \$570 million in-
25 vested in the actual plant now. Now if I multiply that by

eb2 1 33-1/3, which would make 100 percent, I'd get a figure of
2 nearly 19 billion bucks in this plant. And I believe that
3 the costs and benefits are a little bit out of balance if
4 you spend 19 billion bucks and you're going to have to get
5 your benefits back by sale of electricity.

6 I submit that that indicates something like a
7 four times higher price for electricity than they submitted
8 in these hearings previously, and I think it is dishonest.
9 And the reason I bring this up is I think it's an informa-
10 tion coverup, and I think that's what these hearings are about.
11 And I think a lot of information has been covered up.

12 I've heard from people in CP&L's financial divi-
13 sion that they are now estimating themselves between six
14 and eight billion bucks for the plant, and I think that if they
15 have such information they ought to bring it before the
16 Board, and I've communicated that to the Board in writing
17 already, I believe.

18 I also would like to know whether if CP&L has
19 such a bad record, and I've looked at these numbers-- These
20 gentlemen say that the number of event reports doesn't
21 matter because they have different safety significance and
22 I'm sure that's correct. Some of these things are probably
23 much more significant than others.

24 But they say they have an action point system and
25 I'd like to know just what these action points are, and how

eb3

1 they decide what number of points each thing gets and how
2 CP&L stacks up on the action points, because if you look at
3 the event reports their record is horrible. If you look at
4 what the inspectors say about them they say nastier things
5 about CP&L than I've seen about almost any other plant in the
6 nation, and I look at them pretty hard.

7 I have a stack of nuclear information that is
8 probably taller than I am, and I'm reading my way through it
9 slowly. And the more I look, the more I'm horrified. This
10 is the reason I'm here.

11 I used to sit across the table from this guy,
12 Kent Hansen, who invented the idea of the Rasmussen Report
13 to reassure people about reactors. And I never thought any-
14 thing to question him about nuclear energy. I guess I thought
15 I knew something was wrong if the government put that much
16 money into it, but I didn't think it was that bad.

17 But the more I looked at it, the worse it looks.
18 Every time you look you see them cover up this risk, they
19 minimize that one. This thing that I tried to bring up about
20 the fire risk. I think maybe the Board misunderstood. The
21 NRC right now is apparently attempting to suppress the results
22 of some studies of cable fires where their cable separation
23 standard not only failed to operate under the normal condi-
24 tions when they tested five and a half feet apart or whatever,
25 but if they burn one cable the other one burns up, too. But

eb4

1 they also failed under the conditions of having smoke de-
2 tectors, sprinklers, and three-inch mineral wool watts over
3 the cables and it still fails.

4 Now Brunswick and Robinson and Oconee, all the
5 nuclear plants that are operating in this state have this
6 cable problem and--

7 MR. REIS: Mr. Eddelman, the Chairman has
8 cautioned me to remind you of when you are off the subject
9 of the capability, the management capability of CP&L, and
10 I think, within my duties to the Chairman, I must say I think
11 you have strayed a bit.

12 My watch shows that you still have another three
13 minutes or so.

14 456 MR. EDDELMAN: Well, let me make a case to the
15 Board that this is relevant.

16 I think if you're operating a nuclear power plant
17 and information comes out to the NRC, whether it's made public
18 or not, that your cable configuration is not capable of
19 surviving a fire in such a way that the safety functions of
20 the plant can be maintained, that that is unsafe management.
21 And I submit that regardless of the NRC's not carrying out
22 its responsibility to protect the public, that doesn't matter.
23 If the NRC doesn't make them do it, they still have the
24 responsibility to assure that those cables will function in
25 the event of a fire.

eb5

1 CHAIRMAN SMITH: Is it your point, Mr. Eddelman,
2 that this applicant, CP&L, by their management techniques
3 have allowed the condition that you describe to exist?

4 MR. EDDELMAN: Sure. They built it that way.
5 It's stated in the testimony. Staff testimony states that
6 CP&L had a greater role in the construction of Brunswick
7 than they did at Robinson. And if you look Brunswick has got
8 more problems than Robinson, so I think that's pretty nega-
9 tive evidence about CP&L's management capability.

10 And the fact that they haven't taken steps to
11 correct this problem on their own I think is indicative that
12 they really don't care about the safety of the public if it
13 is going to cost them money.

14 One of the inspector's comments was that CP&L
15 only did what the NRC made them do as far as health and safety
16 was concerned. And my review of the record indicates that
17 CP&L only does what the NRC makes them do. And you can't even
18 verify that they did what the NRC required them to do in
19 several cases.

20 Let me mention a couple of things that I found in
21 their file when I was up at the NRC in D. C.

22 One is on 5 April 1975 they were cited for setting
23 their instruments trip set points outside the safe operating
24 ranges approved by the NRC. And my suspicion is they did this
25 so that they wouldn't have a lot of trips on their reactor

ab6

1 and have it out of service, not making them money, instead
2 of worrying about the safety aspect.

3 CHAIRMAN SMITH: Let me interrupt just for a
4 moment, Mr. Eddelman.

5 I've observed your limited appearance statement
6 and it is obvious to me that you have done your homework and
7 that you paid very close attention to the testimony. So so
8 long as you remain relevant to these issues, I'm going to
9 remove the time limit from your presentation.

MR. EDDELMAN: Thank you.

1b End WRB 10
WELandon fls.

11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

wel 1

1 In the 5 April 1975 memo, anywhere, I was not able--
2 it was in April of 1975, and I followed the file, I read
3 every page in it through September of '75 --- and I was not
4 able to locate -- I might have missed it, but I was unable to
5 locate any confirmation that CP&L had actually carried out
6 the commitment to make sure that these instruments were put
7 in proper order.

8 Now, this is significant, because when I read all
9 these licensee event reports, they have a tremendous number
10 of problems -- set point drifts, that's when they set their
11 instruments at one level but, lo and behold, it drifts off to
12 another level. Now, they supposedly have had a study underway
13 for some years to find out what causes this. --I haven't seen
14 anything in the documents that have been made available for
15 this hearing that indicates that they've found a solution to
16 the problem. I did see several reports from I believe it's
17 Brunswick-2, the one that's been operating the longest -- they
18 put 2 in service before 1 -- that they had cases where they
19 had four redundant instruments. They have four of these
20 instruments so as to make sure if one fails, there'll be
21 another and they'll be all right. But there are numerous
22 cases -- at least five -- where three out of four failed.
23 And there are two cases that I've looked at where all four
24 failed simultaneously.

25 Now, this, I think, is a good justification for

1 why the NRC junked the Rasmussen Report.

2 But my point about safety is that CP&L's response
3 to this usually is just to recalibrate the instruments and
4 keep on running the plant.

5 There was another case in CP&L's operating records
6 for Brunswick where they took one of their safety systems out
7 of operation to repair it because it had a problem. But, of
8 course, they kept running the reactor at whatever power level
9 they had been -- I believe somewhere between 60 and 100
10 percent.

11 Now, of course as long as they had a Rasmussen
12 Report that said the odds are a billion to one against
13 something going wrong, they said, okay, a billion to one, we'll
14 have it out of operation for 10 hours, 30 hours, no problem.

15 But if you look at the accident records that have
16 come out, you'll see that a combination of operator error and
17 instrument failure and system failure is generally the cause
18 of the worst accidents. It's not just one thing, but a
19 combination of factors, that knock these things out. And
20 these combination accidents seem to happen to CP&L with just
21 too much probability. They a lot of times find that they've
22 been operating for weeks and months with some system out of
23 operation that they hadn't even noticed. And that's because--
24 and some of this is pinned to Mr. Cantrell's testimony, I
25 believe -- that they often have between 50 and 60 of their

1 annunciator alarms, which are the things that tell them that
2 something's wrong, they've got a light that goes on, and some
3 of them have beepers or something like that that tell them,
4 you know, something's wrong here -- well, they have 55 or 60
5 of these things turned off in their plant at any one time.

6 And the worst thing about it was -- and I believe
7 this was Cantrell who did this -- the first time he comes in,
8 he sees all these alarm lights are on, and says, "Hey, look,
9 when you turn these things off, when you turn these beepers
10 off, you've got to have surveillance, you've got to actually
11 check the gauges if you're not going to listen to the beeper."

12 The same way as in your car, your oil pressure
13 light is not operating you'd better have a pressure gauge or
14 check your oil pressure pretty often if you want to make sure
15 your engine is working right.

16 Well, these reactors, I don't need to tell you how
17 dangerous they are. You gentlemen all know how horribly
18 dangerous it would be if something went wrong with them.
19 That's why the Nuclear Regulatory Commission exists.

20 Yet here's CP&L just cruising right along with
21 their reactor, not even bothering to check these things.
22 They just turn the gauges off -- I mean turn the alarms off.

23 So, Cantrell being a reasonable person, I guess,
24 he says to them, "Look, you really shouldn't do this. And
25 here's four examples of things that you should really watch

1 if you're going to turn the alarm off."

2 Well, next time he comes back he notices that they
3 are watching some of them now, but he also notices that all
4 these things that are still turned off, they haven't been
5 putting trouble tags on them.

6 So he says, "Hey, gentlemen, you really should put
7 a trouble tag on."

8 Now, a trouble tag is a thing that says, "We have
9 a problem with this thing." And it also has a little thing on
10 it about when it's going to be fixed, and how it's going to
11 be fixed. You know -- and it tells what the trouble is, if
12 they know what the trouble is -- and sometimes they don't.
13 That's, I guess, typical of any industrial plant that when
14 you try to fix something, you don't always know what's wrong
15 with it.

16 But, at any rate, here they are with the trouble
17 tags. So he says, "Well, gentlemen, put the trouble tags on."

18 Well, next time he comes back they've got some
19 trouble tags on, but they don't have anything about fixing it.
20 And he notices that some of them have been on there four or
21 five months, and he says, "Hey, gentlemen, these things are
22 required in your specifications, that they be fixed within
23 20 days, or within 30 days, or as soon as possible, or
24 whatever, and here you are leaving them for months and not
25 fixing them."

1 Now, this is the kind of stuff that I think is
2 unsafe management. I think it's ridiculous. I think it's
3 farcical. And I think Mr. Cantrell bent over backwards to
4 try to lead these people along.

5 If I could compare it with my teaching experience,
6 if I try to teach somebody something and they don't get it
7 the first time, you have to teach them step by step. Well,
8 that's a reasonable method to use. But it also seems to be
9 very good evidence to me that that inspector's assertion
10 about CP&L only doing what you make them do is exactly right.

11 In other words, they're like a recalcitrant student
12 who doesn't want to do anything, and you tell them to hand
13 in their homework. Then they hand it in, but you didn't tell
14 them to write more than one sentence so they won't write more
15 than one sentence, and so on.

16 The very idea that these people are out here
17 operating a nuclear power plant and you have to tell them that
18 when they turn the alarms off, they've got to look at their
19 gauges; then you've got to tell them that they've got to put
20 a trouble tag on, when it's required in the specifications
21 that they wrote that you have to do this; you've got to tell
22 them that when you put the trouble tag on, you've got to fix
23 it.

24 Now, I think the NRC is just bending over backwards
25 to try to help CP&L here, which I don't think is very well

wel 6

1 protecting the health and safety of the public. Because in
2 other words, it's allowing them to act like idiots.

3 Another thing that was brought up in testimony
4 yesterday, they said -- I believe this was Mr. Long -- said
5 that you'd really expect to have more of these problem
6 reports in the first three months after they got their
7 operating license, because they were just starting up.

8 Well, if you look at the records for, I believe
9 Brunswick-1, its problem reports start peaking after six
10 months, after they got the thing in commercial operation,
11 which is something like 9 or 12 months after they got their
12 license. And I think you'll find a similar case on Brunswick
13 2, which is the one they brought on line earlier.

14 I went through and added them up, month by month,
15 how many they had, and I also noticed another funny thing
16 about these reports, which is, for some reason, CP&L's reports
17 tend to come on a lot early in the year, but then toward the
18 end of the year they tend to thin out a lot. And since they
19 come back to a high level at the beginning of the next year,
20 I've got a suspicion that what CP&L is actually doing is
21 noticing, "Hey, we're leading the nation in licensee event
22 reports again, here, or almost, and we'd better not turn in
23 as many because our records are going to look pretty horrible."

24 This is my suspicion. .

25 I'll tell you another suspicion that I have about

wel 7

1 them:

2 They seem to have a policy that when the law
3 requires, that when their specs require that they report a
4 certain event within 14 days or within 30 days, they will not
5 report it unless by accident in less than about 29 days, or
6 less than about 13 days. And they often run over.

7 Sometimes you can see where the NRC has apparently
8 leaned on them, and then they start reporting them in 29
9 days instead of 35.

10 But -- you know, I'm not saying that it's really
11 serious, the way you report. I think what they're really
12 trying to do is keep it from getting to the public's attention,
13 because these reports always say, "Is there any publicity and,
14 if so, where did it come from?" And you look through CP&L's
15 files, and you'll see that there's usually no publicity.
16 I just think they don't want the public to know about it, and
17 that's why they're delaying them.

18 But I think they're leaning on the NRC, and
19 abusing their discretion in delaying these reports, and I
20 think if they abuse it one place and get away with it, they'll
21 do it anywhere else they can get away with it. It certainly
22 looks like it to me.

23 I don't see any evidence of any great commitment
24 on CP&L's part to do anything except make the most wonderful
25 legal excuses for stuff that they do wrong.

1 Look at this appendix about the civil penalty about
2 them leaving their doors unlocked at Brunswick. Now, the
3 funniest thing to me about that is how stupid some of the
4 lies they tried to tell about that were.

5 Here they are leaving the doors open right under
6 the inspector's nose every time he comes through there, and
7 yet they say, "Well, it's not our fault, and it's not required,"
8 when right there in their specifications it says it's
9 required.

10 They filed, under Shearon Harris' own signature --
11 head of the Company -- filed under his signature a report
12 about this thick (indicating approximately one inch) making
13 an excuse for that.

14 Now, that's a wonderful report.

15 If they'd put that kind of energy into their
16 safety, I imagine they'd do a decent job of it. I don't
17 know if it's possible to do a good enough job, but I think
18 they'd do a lot better job if they'd put their energy into
19 that than into these reports.

20 I think that all this, when you start adding it up,
21 means that their management is not doing the job that they
22 ought to be doing, and I think that that's probably because,
23 as one of these people said in one of these statements, it's
24 probably beyond human ability. Unsinkable ships, and perfectly
25 safe reactors. Well, they ain't no such thing.

1 If you think that on the basis of 400 reactor years
2 of experience, and not having a tremendous accident quite
3 yet, that that's going to justify your committing yourselves
4 to -- let me see. . . 30 years times 75 operating --

5 CHAIRMAN SMITH: Mr. Eddelman, necessarily we're
6 going to have to put some time limitation on you, so what I
7 recommend that you do is that you address yourself to the
8 testimony and factual considerations. You've made a lot of
9 conclusions, and now you're beginning to repeat your conclu-
10 sions, so you're not being efficient.

11 MR. EDDELMAN: Okay.

12 CHAIRMAN SMITH: So stay with your factual observa-
13 tions, and --

14 MR. EDDELMAN: All right.

15 CHAIRMAN SMITH:
16 -- I think you'll have taken better advantage of your time.

17 MR. EDDELMAN: All right.

18 Well, to talk about inferences, I am amazed at
19 these gentlemen, when they are told to recite a simple fact
20 that's written in a report that says, well, for example,
21 CP&L has the least stringent requirements on them, and they
22 have the most problem reports, they won't quote that without
23 hemming and hawing and hedging, and so on.

24 But you ask them to defend one of their positions,
25 what do they do? They pull a number out of their hat.

1 It seems to me that they're saying that the numbers
2 aren't relevant when they say that nuclear power has got
3 problems, but the numbers are relevant to defend their previous
4 positions in testimony.

5 A good example of that is that they say that you
6 can't judge anything from these licensee event reports. They
7 testified to it. And yet you look in their prefilled testimony
8 and what do they say about CP&L's management?

9 Well, they put a list of the licensee event
10 reports and the violations and infractions and deficiencies,
11 and they claim that they're decreasing every year, and that
12 proves that they're safe.

13 Well, it doesn't necessarily prove that they're
14 safe, for they already testified that whether the inspector
15 catches it or not is not something that they can ensure.

16 So, worse than that, they have the 1978 year of
17 that, and they use a partial year because this was prepared
18 before 1978 was over. Well, I went and did a little linear
19 extrapolation of these things -- you know, what it would be
20 if you went through August and you had 156, well, then through
21 the year you'd have 200-some odd.

22 So it looks to me like there's no evidence that
23 would be statistically reliable. And having worked a good
24 bit in educational testing, I can tell you that most statistics
25 probably are unreliable. But these particularly, their sample

wel 11

1 size isn't large enough, and their number of years isn't big
2 enough, to get any reliable trend out of these things, even
3 if the numbers are decreasing. And in some cases, the
4 numbers either are not decreasing, or have not decreased
5 significantly.

6 I think it's also relevant to this hearing, and
7 I want the Board to inquire. Brunswick not only has a huge
8 number of Licensee Event Reports but they have them concen-
9 trated in two areas in which they have the worst record in
10 the nation in '77, which is the year that I've read over, and
11 those are the engineered safety systems and the emergency
12 core cooling system.

13 Now in the emergency core cooling system they seem
14 to have a problem with one thing that isolated their high
15 pressure coolant injection system, and it doesn't work right
16 and never has. So the NRC is now proposing I think, or maybe
17 has -- it states in one place it has been resolved by licens-
18 ing action although when I got the license amendments it
19 wasn't in there so maybe they did it informally.

20 What they were going to do was not require the
21 system to work since they couldn't make it work right. And
22 this seems to be, you know, a standard NRC out where you've
23 got a safety system and can't make it work right, we'll just
24 decide that that was not necessary and we'll not worry about
25 it too much.

WEL/eb1

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

But I think when you're talking about the engineered safety systems and the emergency core cooling system, these are very important systems for protecting the health and safety of the public. And if they're screwing them up so bad, I think the NRC has the responsibility to bring the truth out about it, and to do something about it if it's not adequate.

And again, I think these experts here have some judgments on the issues. They say that they rely on their judgment and indeed, they seem to think that that is the only thing that you can rely on. They won't rely on their own numbers. So I think that the Board has a responsibility to inquire very deeply into this.

I think that --

CHAIRMAN SMITH: I think you're winding down now. You're summarizing.

MR. EDDELMAN: Oh, yes. I'm about worn out. You know, I'm doing this extempo. I didn't think you were going to let me say anything, and you have to bear with me.

CHAIRMAN SMITH: Well, why don't you summarize and then we'll have a discussion with you about your input.

MR. EDDELMAN: Okay.

Well, in summary --

CHAIRMAN SMITH: Unless you had not covered in substance every part of what you had?

WEL/eb2 1

MR. EDDELMAN: I think I could make some more if I
2 tried to review the testimony in my head.

3 CHAIRMAN SMITH: Well, why don't you summarize and
4 then we'll discuss perhaps further opportunities?

5 MR. EDDELMAN: Okay.

6 Well, I think that the most important things that
7 I'm trying to bring out here are that CP&L has a lousy record
8 in a lot of respects which they try to cover up at every point
9 they can. Rather than straightening themselves out, they
10 wait until the NRC makes them.

11 Also, I think these experts in NRC are attempting
12 to juggle so many contradictions that I believe they're going
13 to come crashing down at some point if they don't straighten
14 themselves out. When they say that CP&L has an acceptable
15 level of performance and you look in the testimony, at one
16 point they say Well, an acceptable level, what does that mean?

17 And they say Well, we had to have a term that means
18 there's no problem, and this is what this is. When you say
19 it's "acceptable" in an inspection report, you mean there's
20 no problem.

21 Now then, they get up here and they say that CP&L's
22 management performance is acceptable. They apparently were
23 unable or unwilling to define what's "unacceptable" last
24 night. I'd like to see them do that, and just how bad CP&L
25 would have to screw up before it would be unacceptable and

WEL/eb31

they'd say there was a problem with the Shearon Harris facility.

2

But they try to say that their performance is

3

acceptable and at the same time there are all these problems.

4

And my question is just how bad the problems have to be, how

5

do you rank the significance of the problems that CP&L has.

6

If you can't compare them with anybody else's, compare it with

7

themselves.

8

Are they able to do this properly, or do you think

9

they really are hanging back and trying to drag their feet

10

and so on?

11

There is one other thing I'd like to say and that

12

is that these gentlemen who are supervisors and uppity-ups

13

in the NRC seem to have different views than the actual in-

14

spectors who are out there most of the time from these in-

15

spectors' comments that I'm seeing. For example, most of the

16

inspectors resolutely say that they have no opinion about

17

whether CP&L can safely manage a nuclear power plant whereas

18

these gentlemen seem to have the opinion that there's no

19

question that CP&L can.

20

And I see a little contradiction there, particularly

21

with these questions that the inspectors are raising. So I

22

think you ought to get some of these line inspectors in here

23

and I think you ought to get in some of these employees that

24

resigned from CP&L and ask them and find out about this stuff.

25

DR. LEEDS: Do you know the names of those employees?

1 MR. EDDELMAN: I don't know them personally, but
2 I can tell you where they are.

3 In Cantrell's memo, the handwritten copy, he writes
4 a bunch of the names in there, okay?

5 Now, when the NRC transcribes it, they leave this
6 out, the same way they omit the fact that Calloway County,
7 Missouri is a Daniel International plant, and of course that's
8 a screwed up plant. But they mention the ones where Daniel
9 seems to be doing a decent job, or they haven't uncovered a
10 whole mess. But they don't mention Calloway.

11 I talked to Mr. Reis about this on the phone, and
12 he said he was pretty sure I was right, that Calloway was a
13 Daniel plant, and he didn't know why it was left out. And
14 I'm sure he does know.

15 CHAIRMAN SMITH: Okay. We'll come back to you after
16 the Board confers. But for now I think we'd better get on
17 with the testimony.

18 DR. LEEDS: Will you be here for the rest of the
19 day, Mr. Eddelman?

20 MR. EDDELMAN: I'll be here until your hearings
21 are done.

22 CHAIRMAN SMITH: Let's take a five-minute break.

23 (Recess.)

Madelon 1
lws l WEL
cd mpbl 2

CHAIRMAN SMITH: Gentlemen, are you ready to

proceed?

3 Whereupon,

4 CHARLES E. MURPHY,

5 VIRGIL L. BROWNLEE,

6 FRANCIS J. LONG,

7 and

8 HUGH C. DANCE

9 resumed the stand as witnesses on behalf of the Regulatory
10 Commission Staff, and, having been previously duly sworn,
11 were examined and testified further as follows:

12 CHAIRMAN SMITH: Mr. Reis, I know that you are
13 aware that Appendix A to our Rules of Practice anticipates
14 exactly what you have brought about in part by your motion,
15 that it also anticipates that one of the reasons that
16 limited appearance statements are made is so that the
17 parties have an opportunity to respond to those points.
18 And I would expect that the Staff anticipated doing that
19 when you made your motion.

20 MR. REIS: Yes.

21 CHAIRMAN SMITH: And we would expect for the
22 Staff to have a good response to Mr. Eddelman's points.

23 DR. LEEDS: A complete response.

24 MR. REIS: I've already instructed the Staff
25 that as soon as we get the transcript we shall go through it

mpb2

1 and have a good detailed response to his points.

2 CHAIRMAN SMITH: All right.

3 Furthermore, the Board, in listening to Mr.
4 Eddelman, was impressed that he has done, obviously, a
5 considerable amount of homework. He has been very observant
6 during this hearing. We don't agree with all of his
7 inferences and conclusions from the hearing, but nevertheless
8 he has demonstrated that he understands what's happening
9 here.

10 Therefore -- we also observed that under the
11 Commission's intervention rules, a Board has a great deal of
12 discretion on permitting a party to intervene or partici-
13 pate in a hearing, even if they don't have standing, even
14 if their petition is otherwise invalid, if it appears that
15 a contribution to a full record can be made.

16 Now the difficulty with that discretion is that
17 it does not give the Board a right to suspend Section
18 2.714, the intervention rules, which allows parties to
19 appeal a ruling granting intervention. And we already have
20 in this case a decision by the Board and the appeal board
21 that Mr. Eddelman may not be an Intervenor.

22 I might say that we have a different circumstance
23 here in which he has demonstrated, in my view, in the
24 Board's view, the potential for being able to make a con-
25 tribution. Therefore we're going to exercise our

mpb3

1 discretion by allowing him to sit at Counsel table with the
2 Intervenors and the Attorney General, whom I assume will
3 welcome him -- is that right, sir?

4 MR. ERWIN: We would welcome him with open arms.

5 CHAIRMAN SMITH: And you may sit up there, Mr.
6 Eddelman, and through those attorneys -- through those
7 attorneys -- you may advise them and you may participate in
8 the hearing as an advisor to those attorneys.

9 Now we're allowing you to sit at counsel table
10 with the understanding which I will ask you to commit to us:
11 that you will conduct yourself as if you were an attorney.
12 I mean, that is you will be subject to the Board's rules
13 concerning decorum, just as if you were subject to our
14 control as an attorney.is.

15 Would that be satisfactory to you, sir?

16 MR. EDDELMAN: I'm not sure I understand all
17 the rules the attorneys --

18 CHAIRMAN SMITH: That means if I tell you to sit
19 down, you will sit down. If I tell you to be quiet, you'll
20 be quiet.

21 MR. EDDELMAN: Sure. You told me that before.

22 (Laughter.)

23 MR. EDDELMAN: I'll act nice.

24 (Laughter.)

25 CHAIRMAN SMITH: Well, acting nice is not

mpb4

1 synonymous with being an attorney.

2 (Laughter.)

3 MR. EDELMAN: It wasn't the attorneys I was
4 referring to.

5 (Laughter.)

6 CHAIRMAN SMITH: Well, you're welcome. I'm
7 sure that there is no problem.

8 However, you must appreciate that the activities
9 of yesterday did bring in some question as to whether all
10 people in this room are willing to comply with the Board's
11 directions. And I think you observed that.

12 MR. EDELMAN: Yes, I will.

13 CHAIRMAN SMITH: With that in mind, then, Mr.
14 Eddelman, we're going to take your commitment that you will
15 comply with all of the orders of the Board with respect to
16 decorum.

17 MR. EDELMAN: You mean as far as conduct, right?

18 CHAIRMAN SMITH: As far as your personal conduct
19 in this hearing room.

20 MR. EDELMAN: Right. I wouldn't want to make a
21 commitment --

22 CHAIRMAN SMITH: That's right, we have no desire
23 nor jurisdiction over you outside of this hearing room.

24 MR. EDELMAN: Yes.

25 CHAIRMAN SMITH: So in that case, if you'll

mpb5

1 find a chair -- I think there's already one there for you.

2 Furthermore, as I understand it, I had your
3 name placed on the service list of this proceeding, and
4 you have received copies of the testimony, haven't you?

5 MR. EDELMAN: No, I have not, Mr. Smith.

6 CHAIRMAN SMITH: Would you please make available,
7 parties, copies of the testimony for Mr. Eddelman?

8 MR. EDELMAN: Mr. Reis has made some of it
9 available to me.

10 MR. ERWIN: Mr. Eddelman has made requests of
11 me in the past and I've honored such requests. He has had
12 much of the testimony.

13 But I think it would be appropriate, since we've
14 had to share the testimony, if they would make -- the Staff
15 and the Applicant would make the other available to him so
16 that he may have his own copy.

17 CHAIRMAN SMITH: They have indicated they have
18 already done it in a certain respect, and each indicated by
19 nodding that they will make these materials available to
20 Mr. Eddelman.

21 Furthermore, Mr. Eddelman, you may during the
22 -- you may borrow my copy of the transcript during the
23 course of this hearing, providing that you don't mark it.
24 I mean don't put any marks or comments in it.

25 MR. EDELMAN: Right.

mpb6

1

CHAIRMAN SMITH: That would be grossly unfair.

2

MR. EDDELMAN: That's known as ex parte communication, is it not?

3

4

CHAIRMAN SMITH: Yes.

5

But you may borrow it and return it to me whenever I ask for it, or if I forget to ask for it, give it to me at the end of the hearing.

6

7

8

MR. EDDELMAN: I'll guard it with my life, sir.

9

DR. LEEDS: I don't think I heard whether or not the Attorney General was going to accept his help. I heard Mr. Erwin accept it.

10

11

12

MR. MYERS: That's fine with me, sir.

13

CHAIRMAN SMITH: He did not immediately.

14

DR. LEEDS: I missed the nod. I'm sorry.

15

CHAIRMAN SMITH: Mr. Eddelman.

16

(Handing document to Mr. Eddelman.)

17

DR. LEEDS: Mr. Eddelman, I need to say one thing to you, and the Board has discussed this and suggested I be the one to transmit this information to you. Maybe the Chairman's getting hoarse.

18

19

20

21

But under the ruling of the Commission establishing this hearing, as we discussed several times and in fact just discussed before your limited appearance statement, you mentioned that -- there was a question that came up about the scope of this hearing. In every hearing there is an

22

23

24

25

mpb7

1 implicit assumption made, and in fact it is in the rules and
2 regulations, that the Board makes an evaluation of whether
3 or not the Staff's review of the license application has been
4 adequate. And I don't want you to misinterpret our state-
5 ments about the scope of this hearing not to include that
6 review of the Staff's review of the license application.

7 MR. EDDELMAN: Well, let me see if I understand
8 you correctly.

9 What you're saying is that in every hearing
10 the Board still has to make a judgment as to whether the
11 Staff's review of a license application has been adequate,
12 and that that's an issue in this hearing even though it's
13 not in the NRC's order. Is that correct?

14 DR. LEEDS: Well, it's not an issue in this
15 hearing with respect to the entire application; but it's
16 an issue in a sense in this hearing with respect to the
17 part of the original hearing that we're redoing.

18 MR. EDDELMAN: So that you could, for example,
19 raise the question of why, if that review was made for
20 Robinson or Brunswick, they have all these problems now
21 if the capability was correctly evaluated at that point.

22 DR. LEEDS: We have jurisdiction over Harris,
23 but we're evaluating the management capabilities of the
24 Licensee.

25 MR. EDDELMAN: Well, that's what I'm saying,

mpb8

1 their management capabilities for nuclear plants would be
2 on the nuclear plants that they had, is that not correct?

3 DR. LEEDS: I think maybe Mr. Erwin may be
4 reading what I'm trying to transmit to you.

5 Could you sort of talk to him about that? And
6 then if it's not clear I'd be glad to try to explain it
7 further.

8 (Pause.)

9 MR. EDELMAN: Okay. I've got it.

10 CHAIRMAN SMITH: Are there any other members of
11 the public who have submitted written statements who would
12 like the opportunity to go over those statements orally now?

13 I want to remind the members of the public they
14 have an opportunity to submit written limited appearance
15 statements. If after we review them it appears that the
16 statement is sufficiently confined to the limited issues we
17 have to consider, we will either read them into the record
18 or if that person is present when we get to the review and
19 time permitting, we will give that person an opportunity to
20 repeat that statement orally.

21 The only thing we are asking is some indication
22 in advance that the person making a limited appearance
23 statement is making a statement on issues over which we
24 have some power to do something about.

25 (No response.)

mpb9

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

CHAIRMAN SMITH: All right.

You had an item of business that I cut you off on, Mr. Reis, and I apologise for it. Did we attend to it?

MR. REIS: I think we have attended to all of it.

MR. ERWIN: Mr. Chairman, may I make one brief statement in light of the Board's action?

I would like the record to reflect the humble thanks of the Intervenors for the action that they have just taken. Since we don't always have occasion to thank the Board for their rulings, I'd like to take this opportunity to.

CHAIRMAN SMITH: Well, we can't accept your thanks, because we're doing our duty. But we appreciate your sentiment anyway.

DR. LEEDS: Mr. Reis, yesterday you mentioned you had a list of inspections, of the operating inspections of Brunswick that you were going to give us, is that right?

MR. REIS: Yes.

DR. LEEDS: Okay.

I'd like to see that list. And let me ask you this:

Are there any other lists like that that you would like to give us to complete the record?

MR. REIS: Not that I know of at this time.

(Distributing documents.)

mpb10

1 DR. LEEDS: Is there any particular reason why
2 this list wasn't in the testimony?

3 MR. REIS: It was an oversight on my part.

4 EXAMINATION BY THE BOARD (Resumed)

5 BY DR. LEEDS:

6 Q Mr. Dance and Mr. Long, you were going to go
7 check your offices for notes on the December meeting..

8 A (Witness Dance) Yes, we did.

9 Q Do you have any?

10 A Yes.

11 Q Okay.

12 At the appropriate time, then, I'd like for
13 them to be -- if they're available, copies or whatever, it
14 may not be available here in town --

15 A We have requested for the notes to be forwarded
16 here, but I'm ready to speak on it.

17 Q Okay. Fine.

18 Tell me about it, then.

19 DR. LEEDS: Excuse me.

20 One more thing that I have forgotten in line with
21 the notes.

22 I noticed that in that meeting that was held
23 in December, Mr. J. A. Jones, Mr. B. J. Furr, Mr. H. R.
24 Banks, Mr. S. McManus were also there, and I gather that
25 all four of them will be witnesses here, is that right,

mpb:l.l 1

Mr. Jones?

2

MR. JONES: No, sir.

3

If I heard all the names correctly -- let me see if I can find where you're -- Most of them will be -- Jones, Banks and McManus will be here. Furr will not be.

6

DR. LEEDS: We don't have testimony for Mr. Furr.

7

MR. JONES: Yes.

8

DR. LEEDS: Okay.

9

I would like to have their version of what went on at that meeting in December.

10

11

MR. JONES: Would three of the four of them be adequate?

12

13

DR. LEEDS: Yes.

14

I thought I recalled all four of them as being witnesses. I had to check my notes last night; and so, yes. They're going to be witnesses anyway and I'd like to hear from them on what it is. And you may want to do that on direct.

15

16

17

18

MR. JONES: That's the '78?

19

DR. LEEDS: It was January --

20

MR. TROWBRIDGE: January 11.

21

DR. LEEDS: There was a significant licensing meeting on January 11, held in the Region II office in Atlanta, I guess, of '78.

22

23

24

MR. JONES: Dr. Leeds, may I inquire, do you

25

MPB/eb1 1
ils mob ll 11

2 have some documentation regarding that meeting that we may
not have in the Public Document Room or something?

3 DR. LEEDS: I pulled what was in the Public
4 Document Room. I see no reason-- In fact, it looks like I
5 have two copies of the letter. I made some marks on one of
6 those.

7 Excuse me just a second.

8 (Pause.)

9 MR. JONES: If that is an inspection, a formal
10 inspection report, we can locate a copy of it. If it's not,
11 I'm not sure that we can.

12 DR. LEEDS: Well, I have marked on a copy of a
13 letter but I happen to have two copies of the letter, clean
14 copies, and I have only marked --

15 WITNESS DANCE: Dr. Leeds, I have the inspection
16 number if that helps.

17 DR. LEEDS: Was that the official inspection
18 report you were looking at yesterday?

19 WITNESS DANCE: Yes.

20 DR. LEEDS: Okay.

21 MR. JONES: 7802, and the transmittal letter
22 for 7802 and the report itself, is that what we're talking
23 about?

24 DR. LEEDS: Yes, 7802. And there was a letter --
25 there was a letter, I guess, transmitting an agenda for that

mpbl
flws
ebl

1 meeting that was supposedly transmitted to you, I assume.
2 It was January the 11th of '78 -- no, I'm sorry, the date
3 on the agenda is marked December 27th, 1977. There was
4 a letter to Mr. Jones which is stamped out as December 27th
5 -- yes, it says "An agenda is enclosed." And it was from
6 Mr. O'Reilly to Mr. Jones.

7 MR. JONES: Okay.

8 DR. LEEDS: And then there was a Notice of
9 Significant Licensing Meeting, which I guess would have
10 come to you. If you don't find those in your files, sir,
11 I have a copy of all of that that's unmarked.

12 MR. JONES: The Notice of Significant Licensing
13 Meeting, I'm not sure what it is. And it may be a part of
14 the Public Document Room files. So we may not have that.

15 (Handing document to Counsel.)

16 DR. LEEDS: Let the record show that I handed
17 a copy of that Notice of Significant Licensing Meeting
18 which did not have any marks on it.

19 MR. JONES: We'll be prepared to respond to
20 this.

21 DR. LEEDS: Thank you, sir.

22 BY MR. LEEDS:

23 Q Okay, Mr. Dance. Sorry for interrupting you,
24 but I wanted to get that all squared away before I forgot.

25 A (Witness Dance) May I clarify the Notice of

mpb2

1 Significant Meeting?

2 Q Yes, please.

3 A That notification is an in-house NRC notifica-
4 tion, and the Licensee probably did not receive that.

5 Q Okay.

6 I received that from the Public Document Room,
7 so I presume it's public information.

8 A Okay. Fine.

9 Its purpose is to do the same thing the letter
10 to the Licensee did.

11 The meeting in question, January 11, 1978, is
12 covered in the Robinson inspection report you referenced.
13 It also has a common Brunswick docket inspection report
14 number, 7803. The meeting occurred for a dual purpose.

15 As I recall yesterday we discussed that at
16 least every three years we have all licensees -- we have
17 a meeting with all licensees to discuss past performance
18 and operating history. Even if we had no issues, we would
19 still make that contact every three years.

20 In this case we coupled this meeting, which
21 was the normal three year period for Robinson--the previous
22 Robinson report of such a meeting was December 3, 1974.
23 The previous Brunswick corporate meeting, even though --
24 well, the previous Brunswick corporate meeting which also
25 involved CP&L, of course, was February 20, 1976.

mpb3

1 The items covered during this meeting were --
2 well, I said it was a dual purpose, a dual purpose meeting,
3 one for the three year Robinson management review, and just
4 prior to that we had a couple of personnel errors which had
5 occurred at the Robinson Plant which we, in Region II,
6 thought it was appropriate to call the licensee in to re-
7 emphasize our concern on personnel errors.

8 These two personnel errors involved loading
9 the wrong fuel assembly into a cask for shipment. This
10 was caught before the cask left the facility, and was
11 corrected. The second event involved -- both of these
12 events occurred in November '77. The second event involved
13 the inoperability of the safety injection pumps prior to
14 reactor startup.

15 This error was a procedural error on CP&L's part.
16 They caught it on the succeeding shift. But it permitted
17 the reactor to be heated up from 200 to 320 degrees. The
18 tech spec in this case calls for the safety injection pumps
19 to be operable prior to going above 200 degrees.

20 It was these issues, a general review of the
21 past non-compliance history, licensee event report history,
22 and reiteration of how we, the NRC, conduct our inspection
23 program in the different functional areas. We considered
24 the meeting as part of our normal function. If we see errors
25 we're going to call a licensee in to reiterate our concerns

mpb4

1 before a trend develops further.

2 In this case we did not give notification to the
3 Board and we didn't think it was that significant of a
4 meeting.

5 Q Okay.

6 Let me ask you this question:

7 Do you four gentlemen collectively or maybe
8 individually, do you feel like you're part of I&E manage-
9 ment?

10 A (Witness Murphy) Yes, sir. We are considered
11 as a part.

12 Q I read through the Board notification last night
13 and Mr. Thornberg wrote to Mr. Gower on November 1st, and
14 it's the first page of Tab 2. And he has -- Mr. Thornberg
15 is the director of the Division of Reactor Construction
16 Inspection. He stated in his letter:

17 "It is the position of the I&E
18 management that the methods are imperfect,
19 but they do provide insights into licensee
20 regulatory performance."

21 Could you give this Board any guidance as to
22 what kind of insights that these methods are supposed to
23 provide?

24 A Sir, I am not aware of the details of the
25 report, or the thinking processes behind the reports

c5

mpb5 1

sufficiently to comment with any degree of accuracy on
Mr. Thornberg's statement in the report.

2

1C flws 3

(WRB) 4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1C

RB/wbl
is Madelon

1 MR. LEEDS: Mr. Reis, will anybody else be able
2 to tell us what insights this report is supposed to do,
3 to help the Board?

4 MR. REIS: We have not proposed to present anyone
5 to do that. I didn't call for any, or put on my witness list
6 any person from I&E management in Washington as contrasted
7 with I&E management in the regional office.

8 MR. LEEDS: I think I want to discuss this with
9 the other Board members, and we may come back to this. It's
10 just something that I picked up last night in my reading.

11 BY DR. LEEDS:

12 Q Gentlemen, you used an acronym that I'm not
13 familiar with, or at least I didn't recognize, or it confused
14 me. What is MUF or LEMUF? It's on page 13 of your testi-
15 mony.

16 A (Witness Long) It's in our safeguards area. It
17 has to do with accountability of nuclear materials, the
18 materials unaccounted for is the MUF abbreviation.

19 Q What is LE?

20 A And the other is, has to do with error, the
21 degree -- I think it is the least error.

22 A (Witness Murphy) Limiting error.

23 A (Witness Long) It's in the limitations on -- it's
24 an alarm level in their accountability process, above or
25 below their--

wb2 1 Q Okay. So you check two things: you check how
2 much they have unaccounted for, and then you check how much
3 error they have in accounting for what they account for; is
4 that what you mean by LEMUF?

5 A There is a reportable error during their--
6 They periodically, very frequently, account for all material.
7 And there are plusses and minusses because the material in
8 the system is held up for -- at various places where the
9 accountability.... It varies, in other words.

10 Q Okay.

11 A So there's a technical specification point in
12 this error, and when it gets to a certain level above or
13 below they report it to us.

14 Q I have a possible misinterpretation on page 17
15 and I want to clear it up. It's the first full answer on
16 page 17. It says you've been inspecting construction for
17 ten years, and for nine years you've been inspecting the
18 operation. I presume those are overlapping, they're not
19 sequential?

20 A (Witness Murphy) Yes, sir. I believe that that
21 was the context of that. I haven't found it in the reference.

22 Hold on.

23 A (Witness Long) Which page was it?

24 Q Page 17, the first full answer. The fifth line
25 down.

wb3

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A (Witness Murphy) That is overall. We began inspecting CP&L in, I believe, early '68, somewhere close to that timeframe.

Sir, I might add that operations inspections are performed before the start of the actual plant operations, and so it gives a higher number than if you would go from the date of the operating license.

Q Okay.

On page 18, the second question. There is the limitation that says, "...which inspectors conducted the most inspections at Brunswick and at Robinson since January 1, 1978." The "since January 1, 1978," did you interpret that to mean Brunswick and Robinson, or just Brunswick? And how do I interpret Appendix B in light of that limitation in the question? Or should that have been '76 instead of '78 in the question?

A (Witness Dance) We provided the information from '76 on.

Q Okay. Then it should have been '76 in the question then.

A Yes.

Q On page 24, at the top of the page, in answer to a question about how do I&E inspectors retain their objectivity it says, "Fourthly, we have extensive restrictions relating to inspectors inspecting former employees."

wb4

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Should that have been "employers," or both?

A (Witness Murphy) Actually, primarily employers. But, yes, it would also extend to employees. I would consider it a typographical error.

Q Anybody they had a business relationship with?

A Yes, sir.

BY CHAIRMAN SMITH:

Q Could we then amend your testimony to state "former employees or employers?"

A Yes.

BY DR. LEEDS:

Q On page 26, in answer to a question about-- I will paraphrase it. Well, let me read the question, it's less dangerous.

"How do you assure that the region's position as it relates to licensing a facility accurately reflects the facts developed during IE inspections, investigations and inquiries?"

And the answer continues through to page 26. And the first full paragraph contains the following sentence:

"No one in the supervisory chain above the inspector is permitted to make substantive changes to an inspector's report."

What do you mean by "substantive changes," what kind of changes are made?

5.075

wb5

1 A If there is a typo, a typographical error, the
2 supervisor could make a change without consulting with the
3 individual. He could not make a change to the facts that
4 are presented in the report or to change a professional
5 conclusion reached as a result of those facts.

6 Q So grammatical and typo changes--

7 A That is the limitation, sir.

8 Q Okay.

9 BY CHAIRMAN SMITH:

10 Q We all have questions on this point.

11 The next sentence says,

12 "Prior to the writing of the report
13 the inspector is required to discuss his findings
14 with his supervisor."

15 What's the purpose of that pre-writing interview?

16 A Actually this is a part of the programmatic
17 requirements for debriefing the inspectors to determine if
18 they have findings of substance that should be acted upon
19 immediately.

20 Q So he must report, as a question of time, the
21 substance of his inspection?

22 A Yes, sir.

23 And I might add: if he finds something signifi-
24 cantly wrong -- and I will grant it is hard to define
25 "significantly wrong" -- at a site, he is instructed to call

wb6

1 his supervisor then, so that action can be initiated.

2 Q But my concern, of course -- the reason the
3 question is asked: it would seem the second sentence, without
4 explanation, takes away the independence of the first sentence.
5 I mean, it would be inconsistent, in my view, to have a
6 policy in which the supervisor may not make substantive
7 changes but require the inspector to discuss his findings in
8 advance; unless, as you explain, it simply is a question of
9 getting that report to him at the earliest possible moment.

10 A Yes, sir.

11 Q But what if it happened that it just works
12 out the inspector can write his report before he talks to the
13 supervisor who is on sick leave?

14 A There are many variations on this, sir. For
15 example, when there's a supervisor absent there's an acting
16 supervisor present. And that acting supervisor would hear
17 the report.

18 Actually, the inspector could write his report
19 physically while he is conducting the inspection. But that
20 is not the complete published report, sir.

21 I would expect, in that the supervisor is facing
22 quite a few men on a Monday morning, for example, coming
23 back from inspections the week before, that they will have
24 done some work on occasion on the report prior to him speaking
25 to them.

wb7

1 A (Witness Dance) May I comment?

2 The sentence where it says "The inspector must..."

3 Well, "Prior to the writing of the report the inspector is
4 required to discuss his findings with his supervisor." That
5 is, at the conclusion of an inspection, when the inspector
6 returns to the region, he debriefs the findings of the
7 inspection with the supervisor.

8 Q Yes, that's exactly what Mr. Murphy said.

9 But I still cannot understand the absolute
10 requirement, separated from a time sense, that the inspector
11 may not write his report.

12 A (Witness Murphy) I think that's a little matter
13 of semantics, sir. The written report frequently would
14 exceed the twenty days that we would like to see, the fifteen
15 to twenty days that we would like to see in a report being
16 issued.

17 The writing-- If you go into the beginning of
18 the writing of the report, no, that is not the intent of that
19 sentence.

20 Q But I think the sentence really, for the record
21 to be accurate, should be modified to explain just in what
22 sequence -- what the requirements are. If the fact is the
23 inspector is free to write his report and is free from
24 pressure to make substantive changes, let's let the testimony
25 reflect that. But the way I read the testimony it is that you

wb8

1 give him freedom on one hand and, on the other hand, you
2 make it clear in advance what he's going to write.

3 A I will make an effort to change it to make it
4 more readable, and report back to the Board.

5 Q Fine.

6 BY DR. LEEDS:

7 Q Throughout this testimony up to here there has
8 been a general attempt to isolate the inspector from the
9 licensee in the sense that he doesn't inspect his employers
10 or his employees, he is rotated in or out. --former employees
11 or employers. There was an attempt to not have an inspector
12 on a plant too long, three years or something like that, as I
13 remember. Is that right?

14 A That's correct, sir.

15 There's an old -- actually going back to the AEC,
16 I think the docket identification is Code 900 that put a
17 limitation on the time that an inspector must be within
18 NRC before he could inspect a previous employer. And this
19 was to reduce any chance of conflict of interest.

20 Q Okay.

21 Now similarly with the time interval about how
22 long he inspects a particular plant, or a particular applicant
23 or a particular licensee, isn't there a time limit on how
24 long he can do that?

25 A There is a time limit. The general policy is that

wb9

1 we limit to three years. We have quite a problem, because of
2 the numbers and the combinations, of adhering to it strictly.
3 It may run to one year, it may be as much as close to four,
4 as I recall is about the maximum that I'm aware of. Mostly
5 it is below the three-year limit. And this is to assure that--
6 And, by the way, this is primarily to the project inspectors
7 also; say, for example, Mr. Cantrell's position. This is
8 to, in a sense, to keep the inspector either from having
9 the blinders on, to get the benefit of someone else's viewpoint;
10 there are many reasons for this. It's an objectivity type
11 of policy.

12 Q Well I think it's a good thing, myself.

13 Q A Yes.

14 Q Okay.

15 Now the next question is: I gather that's not
16 done at the supervisory level; is that correct?

17 A Sir, Mr. Long and I have been switched in
18 positions, my section chiefs have been rotated in their
19 positions. There was a recent change in Region 3 of branch
20 chiefs and section chiefs. And I would say though there is
21 no formal written policy requiring such, generally speaking
22 promotions, transfer, this type of thing, would take care of
23 such.

24 It has been done, it is done.

25 Q Okay, so there is an informal, then, switching

wb10

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25

about of supervisory positions as well?

A That is correct, sir.

End IC

WRBloom

d ebl

1 Q Now I'd like to go to page 28. The answer is on
2 28, the question is on 27. I think the quickest way to get
3 into this would be to ask you gentlemen to read the question
4 at the bottom of page 27 and then read the answer at 28
5 because my questions are not specific with respect to a
6 sentence or so. I just want you to refresh your memories.

5.200

7 This is back to the problem with respect to
8 Mr. Cantrell's conclusion that the licensee ought to -- that
9 the license ought to be conditioned. And I gather that was
10 not included in Mr. Dance's and Mr. Brownlee's testimony.

11 My problem is I have a problem trying to resolve
12 what is said in this paragraph about completeness with the
13 omission of that conclusion of Mr. Cantrell's.

14 Is it a problem in the sense that what you in-
15 clude for completeness are only facts that are reported in
16 the record but that conclusions of inspectors are not con-
17 sidered to be thrown in the hopper for completeness? Is that
18 what you're trying to tell me in this answer?

19 A In that I was not directly involved on the other
20 side of the fence, I will try to provide an answer to this
21 in light of how we were to operate for such.

22 Recognizing the large numbers of inspectors that
23 do inspect at sites, our insistence is that the inspection
24 report accurately reflect the inspector's findings and also
25 that during the course of these inspections the inspector

JRB/eb2 1 has the opportunity of making known his concerns, be they
2 with the licensee's actions or with the requirements imposed
3 by the NRC on the licensees.

4 The inspector has a real responsibility at the
5 time of the concerns to recommend the types of enforcement
6 actions that should be taken and, not only at the end of each
7 inspection but we would expect him as a professional to con-
8 tinue these types of actions, based on what he is seeing,
9 how he is seeing a licensee perform.

10 We do, as managers, have to consider the over-
11 all picture that is presented by the record on the perform-
12 ance of a licensee, and to take those actions of either going
13 up through the management to obtain changes in the regula-
14 tory requirements or going over and, if you will, reminding
15 the licensee of the requirements that he is to meet to con-
16 tinue his operations.

17 Now in reviewing these actions, we must consider
18 the bases of the inspector's position, together with those
19 of the others, the over-all view, the other inspectors' edit,
20 the person's technical expertise in the area.

21 We have not made an attempt to inform all Boards
22 of all negative views, if you will, over the period of time
23 because, as a part of the management process, we have weighed
24 these matters as to whether the licensee is meeting the
25 requirements imposed upon him, or whether the matter should

WRB/eb3 1

be referred on up to headquarters for resolution.

2

Q Well, let me try again to ask my question because

3

I am not sure-- Either I didn't ask it properly or you didn't

4

answer it in the way that I was thinking it would come back,

5

or something or another. I'm not sure what the problem is.

6

A I'm sorry.

7

Q Let me try it over again.

8

The answer states:

9

"The record reflects the consensus

10

of all inspection findings."

11

Now I assume "findings" means facts, conclusions

12

about what should be done with results of things that have

13

been found at the inspection and so forth. And you state

14

that the testimony -- I presume "record" and "testimony"

15

are interchangeable there. The person prepares the testimony.

16

The record reflects the consensus of all those inspection

17

findings.

18

Could I substitute "testimony" for "record" be-

19

cause "record" has a very specific meaning to us?

20

A The "record" is the docket record. It reflects

21

all of the inspection findings.

22

Q Okay.

23

Does the testimony reflect-- Is there assurance

24

that the testimony reflects all the inspection findings?

25

A Sir, if you say "reflect," does it detail every

WRB/eb4'1

1 minute problem that might have been perceived by each and
2 every inspector, I would say No.

3 If you say does the record -- does the testimony
4 reflect the over-all substance of the findings, I would say
5 Yes.

6 Q Okay.

7 Now it says:

8 "This testimony received the concur-
9 rence of an appropriate member of management that
10 it accurately reflects the record."

11 That "record" then being the docket as you ex-
12 plained it to me. Is that correct?

13 A Yes, sir.

14 Q Okay.

15 Now my problem is what checks are made to make
16 sure that the person who supplied the information agrees
17 that it accurately reflects the record that he made, because
18 he made a part of the record as I see it.

19 A The inspector, at the time the inspection report
20 is issued, has concurred in that report, so that report
21 should reflect his views at the time of the inspection.

22 Q Okay. That's not the problem, though.

23 The problem here is this testimony receives the
24 concurrence of an appropriate member of management that it
25 accurately reflects the record. So it's not a question of

NRB/eb5

1 whether or not the licensee -- I may use the wrong term here,
2 but the written inspection report, whatever that is -- Is
3 that the right word, inspection report?

4 A Right, sir.

5 Q The inspection report does not reflect both
6 management and the inspector's view. But the question is
7 whether the testimony given to the Board clearly reflects
8 the inspector's views because there has to be -- whenever you
9 prepare testimony there has to be editing or, you know, a
10 selection process or whatever.

11 A Sir, obviously in that we lose inspectors by
12 attrition, transfer, and so on, not every inspector that has
13 been to a facility is polled, if you will, or manages to see
14 final testimony. The inspector may be out of all this when
15 testimony actually goes -- is issued, typed.

16 The reviewer-- The supervisors do review at
17 least partially, generally to the extent time permits, all of
18 the dockets that have been used to prepare the testimony
19 but rare would I say there would be the opportunity for an
20 inspector to re-read -- for every inspector in the region that
21 has been to a site to re-read every page of the testimony for
22 every edition of the testimony to see that he has complete
23 concurrence in all aspects of it.

24 Q Well, what about the inspector who is called the
25 principal inspector at the site of the plants that we're

WRB/eb6

1 directly concerned with?

2 A Generally speaking, the principal inspector at a
3 plant is -- has participated in the preparation of the testi-
4 mony though I will say that this is not always the case.

5 Q But that's a time sequence problem because in
6 the preparation of the testimony, then there is somebody else
7 who prepares the testimony. It's a question of afterwards
8 to make sure that testimony clearly reflects his views.

9 A Hopefully the reports that he has prepared reflect
10 his views, sir.

11 Q Mr. Dance, did you have something you wanted to
12 say?

13 A I think each of the gentlemen here would want to
14 speak to this issue, sir.

15 A (Witness Brownlee) Would it help you if I told
16 you how this testimony was prepared in the office?

17 Q Does the testimony you presented not reflect
18 that?

19 A It does.

20 Q I've read that testimony. I think the record is
21 clear I've read the testimony.

22 A And the checking back with other supporting
23 inspectors, other supporting principals?

24 Q That's with respect to findings.

25 A Okay.

WRB/eb7

1 Q Things that you found.

2 What I'm worried about is conclusions of an
3 inspector, and, particularly in this respect, the conclusions
4 that the license ought to be conditioned,--

5 A That aspect.

6 Q --which seems to me to be, you know, an out of
7 the ordinary, to say the least, kind of statement. It's
8 not something taken lightly.

9 A Agreed.

10 Q --by anybody. And I would presume that a man
11 who's in the position of principal inspector is not a fly-by-
12 night making offhanded suggestions. And it should have been,
13 I presume, rejected with careful consideration.

14 I'm not making any determination on it. But
15 what I'm worried about now is how this testimony is actually
16 prepared so it reflects not only the record as I now under-
17 stand what you're talking about but, in other words, the specific
18 findings and recommendations or conclusions that were not
19 not contained in those -- in that record. And that was the
20 part of Mr. Cantrell's testimony that did not come to this
21 Board

22 A (Witness Dance) May I address that?

23 You're speaking specifically of the '77 testimony
24 that not include Mr. Cantrell's recommendations?

25 Q Yes, sir.

RB/ab8

1 A The decision to not include that testimony was
2 mine, which has been brought out. I think we have learned
3 from that experience. This testimony evaporates on that
4 failing. And the testimony brought forth for this re-hearing
5 was prepared very carefully so that we did include all other
6 views to be offered. If there was any view to be offered we
7 included it in our preparation.

8 I think this testimony we're discussing says that
9 and that if we change any man's recommendation or his comments,
10 it's going to be upon his say-so.

11 Q But this whole answer talks about "record." This
12 whole answer talks about "record" and I'm not worrying about
13 the record at this point, I'm worrying about those extra
14 conclusions that he may have supplied.

15 A (Witness Murphy) Sir, let me speak to this.

16 I have been with the Commission now since 1969.
17 We have had the unwritten policies and at least some of them
18 understood them that we could always go to higher levels of
19 management if we found that we had problems. I have indeed
20 done this myself on several occasions, and have been heard.
21 There has never been any retribution extracted for this.

22 We have also had more lately, and I can't give
23 you specific dates of documents, had the written policies
24 that people go to other levels of management if they have not
25 been -- if they do not feel their policies have been heard.

RB/eb9

1 We have to depend upon the individuals themselves
2 as to how strong they feel on an issue as to the directions
3 that they choose to take.

4 Q I don't seem to quickly find it and I don't want
5 to take the time -- Oh, here it is.

6 Are you referring to the kind of concerns and
7 information in NUREG-0500, differing professional opinions
8 that was --

9 A That's one of the documents, yes, sir.

10 BY MR. BRIGHT:

11 Q I find myself still confused here.

12 Based upon the consensus of the inspectors who come together
13 together with his own experience, the person prepares
14 the testimony. The record reflects the consensus
15 of all inspection findings."

16 Could you say this testimony reflects the con-
17 sensus?

18 A I would say Yes.

19 Q Okay.

20 So then we can go-- Going further on down--

21 A I would say -- correct the written record here,
22 this testimony, to change this word "record" to "testimony."

23 BY CHAIRMAN SMITH:

24 Q A correction now is being made. In the seventh
25 line down from the top of 28 the word "record" is being

deleted and the word "testimony" is substituted.

A Yes.

The same actually should be the record, the docket record, also should reflect. In other words the one does not eliminate the other. Both the docket record and the testimony reflects.

Q So your testimony now is the testimony and the docket record?

A Yes, sir.

3/ab10

1d End WRB
WEL fls.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

1 Let me read the sentence as it has been amended:
2 "The testimony and the docket record reflect the
3 consensus of all inspection findings."

4 (The panel conferring.)

5 Is that satisfactory now?

6 A It is, as far as my view on it.

7 Q On this page you state that the person must be
8 knowledgeable and willing to support the testimony discussed
9 earlier.

10 I have an additional interest in that similar to
11 the question I had for the panel members at the opening of
12 your testimony. And that is:

13 You must be willing to support the testimony, but
14 does that mean that he, individually, professionally, must
15 agree with the conclusions of the testimony and the presenta-
16 tion of the facts? Would a witness be required to come
17 before us, or any Board, and present testimony he's willing
18 to support as being the Staff's consensus, which he personally,
19 professionally, individually, may disagree with?

20 A (Witness Long) Let me comment on that.

21 I think that our position on all testimony in the
22 past, and including this testimony, it is a position of our
23 office that the testimony represents our position. The pros
24 and cons of the position have been very widely discussed.

25 For example, there are statements, I'm sure, in

1 reading through the testimony again, I find things that I
2 personally, from my personal viewpoint, I would not necessarily
3 have made the statement, or I would say something different.

4 But the testimony as prepared, as the Region II
5 position, I accept as a valid and very appropriate consensus
6 of all of the inspection records, representing the best of
7 my knowledge of the total docket record on these facilities.

8 Q So it is possible, then, that you or somebody else
9 in your position being sent to the hearing to testify would
10 take the oath stating that you would tell the truth, and then
11 make a statement that you personally do not believe to be
12 the truth? Is that possible?

13 A No. No, I think you would tell the truth.

14 If asked a question about a specific of which you
15 personally are aware, I think obviously you would -- one
16 would state what the actual facts were.

17 But in taking a position on the overall qualifica-
18 tions of the applicant or this licensee to operate a plant,
19 you certainly must accept some things you don't like. In
20 other words, personnel errors -- I don't like them, but I
21 know that they exist. I'm satisfied in the identification
22 of problems.

23 I think that's one point that hasn't been brought
24 out. There are many problems in any facility operating a
25 nuclear plant. The real important thing to us is the

wel 3

1 promptness with which these problems are identified and
2 resolved through corrective action.

3 Q Well, you're digressing from the problem that
4 troubles me as a presiding officer. As a presiding officer
5 who has been involved in confusion in the hearing, what
6 troubles me is that during my many years of experience in
7 trials, I have come to expect witnesses who take the stand and
8 submit to an oath to tell the truth as they perceive it
9 personally.

10 I don't know how to put the Nuclear Regulatory
11 Commission, as an organization, under oath. I don't think
12 you can. I know how to put men and women under oath.

13 That's what disturbs me. How do we accommodate
14 this? How do you come to a hearing in which you are required
15 to give testimony which is not your view, and work that
16 through your personal oath and your personal testimony? How
17 is this done?

18 Can you help us on it, anybody on the panel?

19 A (Witness Murphy) Mr. Chairman, the testimony
20 provided at a hearing by the IE staff represents the position
21 of IE. That is by necessity.

22 The person who supports the testimony, who comes
23 here to present it, if he has any exceptions to this testimony,
24 should have made it known to his management prior to arriving
25 here.

1 If he identifies areas where he has exception to
2 the testimony while he is here, he should make these differing
3 views known.

4 I agree with you, it is inconceivable that a
5 person could swear under oath that this is his testimony --
6 his, as being the IE spokesman -- and then not being able to
7 support the substance of that testimony.

8 Q I don't have any problems with a witness -- you
9 witnesses coming before the Board and saying, "I swear that
10 this testimony is, in fact, the Staff position." That does
11 not trouble me.

12 What troubles me is, as we begin to ask questions,
13 and the questions may or may not reflect that--the witness is
14 giving Staff testimony, and we get into individual judgment,
15 where is the dividing line where we start departing from what
16 has already been thoroughly considered as Staff testimony,
17 and then what becomes the testimony of the individual?

18 I would expect any witness that appears before me
19 and answers a direct question to tell me the truth as he
20 perceives it individually. And I don't think, from what I've
21 been able to read, that this requirement has really been
22 articulated, or that it has really been a clear requirement
23 of witnesses coming before a Board.

24 Do you think it has been?

25 A Sir, I would be the first to agree that we, in IE,

1 probably have not received the degree of legal training that
2 would make us the most knowledgeable of all the nuances of
3 law, and everything associated with the testimony.

4 I also, though, would point out that all of us, I
5 believe, should have the intelligence and the judgment to
6 know the basic right from wrong, and not to be willing to
7 swear under oath that such-and-such is, indeed, true when, to
8 them, it is not true.

9 Q So you don't think that this has happened, or is
10 likely to happen under existing policy, or under any policy
11 given the relative time period of this proceeding, that
12 anybody would be expected to make a statement that he does
13 not personally, professionally support? --

14 A Now, recognize that none of us appearing at a
15 hearing would have the technical expertise to discuss in
16 infinite detail all of the docket, all of the facts that
17 this testimony represents, but to the degree of our knowledge,
18 I would say that we would be in a position to support -- we
19 may disagree with the wording or the phrasing, and in
20 retrospect see a better way of stating something -- but that
21 doesn't enter into the substance of the matter..

22 Of the many hearings that I personally have been
23 involved in, I do not believe that I have ever had the
24 experience of a witness from the IE staff, or any other part
25 of the NRC, making statements that were not correct.

1 Q Okay. So your point there, then, is: Don't worry
2 about the problem as that hasn't come up?

3 A Actually, I could not swear that no one has ever
4 made a mistake, or what have you. I know that under the
5 pressures of being at a witness table your thinking processes
6 tend to slow down, and so on and so forth, and you may make
7 a misstatement. And in re-reading your testimony, you think,
8 "My God, how did that come out like that?"

9 Q I'm not referring to that.

10 A But not as to a true attempt to mislead.

11 Q I'm not referring to that, either. I'm just
12 referring to that point of departure where the witness'
13 professional judgment departs from the consensus of the Staff.
14 That is the problem that I think still has perhaps never
15 arisen.

16 A Not to my knowledge, it has not.

17 Q But it seems to me that there's enough uncertainty
18 and confusion about that point that it should be addressed,
19 and it should be clarified.

20 A Well, obviously, from the testimony that has been
21 received and the documents behind some of the exhibits, the
22 views of inspectors vary widely on facilities. Their views
23 vary widely facility to facility with the same licensee, if
24 you will.

25 Q I'm going to come to that. This isn't my concern.

1 My concern is that I think licensing boards and
2 the record should fully understand what is behind the
3 testimony.

4 A Yes, sir.

5 Q And you can't swear the consensus, you can't put
6 a consensus under oath. And that's just my basic problem
7 right there, you can't put a consensus under oath. And
8 we're expected to make important findings upon testimony that
9 cannot be put under oath.

10 You can put only a human being and his testimony
11 under oath.

12 MR. REIS: Mr. Chairman, for the information of
13 the Board, I might digress, although not directly relevant,
14 but it is certainly highlighted by this proceeding, and
15 probably the impetus to this proceeding, instructions and
16 policies along the lines that you talked about are being
17 formulated right now in the Staff to give the Staff guidance
18 that this be done in the future. And the Staff is aware of
19 the problems you just mentioned and tried to highlight by
20 your examination of the witnesses.

21 DR. LEEDS: But let me comment. One of the problems
22 here that we have -- and I'll try to get it from a slightly
23 different view -- excuse me, Mr. Chairman, for interrupting.

24 But the problem is this:

25 The testimony comes in, and the person who

1 presents it says, yes, this is the consensus view of the I&E
2 department.

3 If the Board does not then ask the following
4 question, i.e., "Do you have any differing view, you personally
5 as an individual, have any differing views than that?" the
6 Board never gets that information.

7 MR. REIS: That is exactly what the policy being
8 prepared will address.

9 CHAIRMAN SMITH: Now, I realize that we've gone
10 somewhat beyond the issues on remand, but not entirely,
11 because we have an obligation to determine the circumstances
12 under which the previous record was developed. We understand
13 now at least this record does not require any individual to
14 give any statement which he, individually, personally, does
15 not believe to be the truth. And I think we've made that
16 clear.

17 DR. LEEDS: Or agrees with. There are two points
18 to that.

19 WITNESS BROWNLEE: Mr. Chairman, I think I've
20 already agreed to those before.

21 CHAIRMAN SMITH: Yes, I think so. That was the
22 gist of the preliminary questions that we had in the opening
23 part.

24 BY CHAIRMAN SMITH:

25 Q Now, my next question is: In any of the testimony

1 received during the hearing on the construction permit, were
2 any of you gentlemen required to give, under the rules, under
3 the policies extant at that time, testimony that you could not
4 personally, individually, professionally support, aside from
5 consensus?

6 A (Witness Brownlee) My answer is no. I believe we
7 stated that previously.

8 Q Well, if you have, excuse me, because I don't
9 remember it being that clear.

10 Tell me, when did you answer that?

11 A I think the fact that when we were here previously
12 we said that was our testimony we gave, and that we took an
13 oath to that, and we did give that testimony.

14 Q But the testimony also says that your testimony
15 reflected the views --

16 A Excuse me. From the construction point of view,
17 that I prepared. Excuse me. And here I'm sitting now, and
18 I'm going to do the same thing.

19 Q All right. But just so there's no doubt about it,
20 let's address each of the people who appeared in the hearing
21 before:

22 Were you required, or did you give any testimony
23 as being Staff consensus which you, personally, individually,
24 professionally did not support? I mean that you believed to
25 be the truth?

1 A That material that I prepared previously that was
2 included in that consolidated testimony, I support fully.

3 Q And may I ask each of you witnesses if that is the
4 case?

5 A (Witness Dance) I second that. I mean I'll say
6 the same thing that Mr. Brownlee said. But I'm not trying
7 to second-guess your words in your decision, where you said
8 you were misled.

9 I recognize that, and --

10 Q I'm going to ask some more questions about that
11 later on, but I want to establish at one point in the record,
12 right now, whether it is the case or not, that the testimony
13 previously given by you gentlemen reflected your individual,
14 professional, personal concept of what you believed to be the
15 truth?

16 A Yes, it did.

17 A (Witness Brownlee) It did.

18 Q You were not depending on a consensus, you were
19 also submitting your own concept of what you believed to be
20 the truth?

21 A (Witness Dance) Yes.

22 Q All right. And that was the case of your
23 testimony, too, Mr. Long?

24 A (Witness Long) Yes.

25 Q In addition to the inputs that you've described

1 on page 28 in the answers to our questions, you also received--
2 you cooperate with legal counsel from the Office of Executive
3 Legal Director, and he reviews your testimony.

4 And I think, as you indicated on page 21, that
5 you received guidance and details of the format of the
6 testimony to be submitted from a Staff counsel assigned to
7 the proceeding.

8 A (Witness Dance) That's correct.

9 Q Now, of course, he explains to you the legal issues.

10 But elsewhere in the testimony I think that you
11 advised the legal counsel, Mr. Dance, that there are problems
12 with the Shearon Harris testimony, and he told you, "So be it,
13 tell it the way it is."

14 A That's correct.

15 Q But I have one point that I do think requires
16 clarification.

17 Would you turn to page 130, Volume III, of the
18 Office of Inspector & Auditor, which will be --

19 A Excuse me. What page?

20 Q 130 of Volume III of the report of the Inspector
21 and Auditor.

22 Did we assign exhibit numbers to those reports?

23 MR. REIS: No, we did not.

24 CHAIRMAN SMITH: All right. Let me digress here
25 and assign exhibit numbers to those.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

The last exhibit number was . . .

MR. JONES: Mr. Chairman, I believe the last Board Exhibit number was 8.

CHAIRMAN SMITH: All right. So we will have Volume I as Board Exhibit 9. Volume II will be Board Exhibit 10. And Volume III will be Board exhibit 11.

Previously, so that the record will reflect this, the Board issued a memorandum and order advising the parties to this proceeding that we intended to receive this report into evidence without a sponsoring witness, and that if any objections were to be made they should be made prior to today.

No objections were made, and I assume, therefore, that there are no objections.

All right, then, we receive into evidence Board Exhibits 9, 10 and 11, which are Volumes I, II and III of the Inquiry into the Alleged Omission of a Line Inspector's Views from the Shearon Harris Construction Permit Hearing, dated November 1978, by the Office of Inspector & Auditor.

(The documents referred to were marked for identification as Board Exhibits 9, 10 and 11, and were received in evidence.)

BY CHAIRMAN SMITH:

Q Gentlemen, on page 130 -- I'm referring this to Mr. Brownlee and Mr. Dance -- and bear in mind that the person

wel 13

1 who made this report is not present, and the person referred
2 to in the report is not present, and we have no basis to
3 believe or disbelieve this report.

4 The question, then, is very narrow:

5 Did you, for any reason, soft-pedal your testimony
6 with respect to CP&L's capabilities to operate Shearon Harris?

7 A (Witness Brownlee) The answer is no.

8 A (Witness Dance) My answer is no.

9 Mr. Chairman, I believe in my interview section of
10 this document it also says that the answer is no.

11 Q Yes, but the difficulty is that this is in
12 conflict with what you said, and I thought that the record
13 should be clarified on this point.

14 Do you recall any such advice from any official
15 in the Nuclear Regulatory Commission?

16 A No.

17 Q Do you, sir?

18 A (Witness Brownlee) No, sir.

19 BY DR. LEEDS:

20 Q Let me refer you to page 29.

21 Mr. Dance, I think you're answering these questions,
22 and I'd like to clarify a point.

23 It says -- the second question is answered by:

24 "I had supervised the inspector at Brunswick and
25 the inspector at Robinson."

1 Is there only one inspector?

2 A (Witness Dance) There is one project inspector.

3 Q Okay. So this should be, then, project inspector?

4 A Yes.

5 Q Do you want to add that to the testimony?

6 A Yes, we would like to add that.

7 Q So on page 29 the testimony is changed to read,

8 as the answer to the second question asked on that page:

9 "I had supervised the project inspector at
10 Brunswick since June 1976 and the project inspector
11 at Robinson since January 1977."

12 The adjective "project" has been added in front
13 of "inspector" in both instances. Is that correct, sir?

14 A Yes, sir.

15 Q I think if you'll turn to page 35 --- and correct me
16 if I missed this -- but on page 35 -- these are questions to
17 you, Mr. Brownlee, is that correct?

18 A (Witness Brownlee) Yes, sir.

19 Q At the bottom of the page, the second question
20 from the bottom of the page says:

21 "Did anyone tell you before you prepared your
22 testimony what the conclusion should be in your testimony?"

23 I think my problem is I don't remember finding
24 that question asked of Mr. Dance in the questions that were
25 presented to him. It's not a question directed to you, Mr.



wel 15

1 Brownlee. I just wanted to make sure it was a question asked
2 of you and that you answered. But I don't think in Mr. Dance's
3 testimony that I find that question being asked.

4 Did anyone tell you before you prepared your
5 testimony what your conclusion should be in your testimony?

6 A (Witness Dance) No.

7 Q Your answer to the question then is no?

8 A No. My answer is no.

9 Q Thank you.

10 (The Board conferring.)

11 BY CHAIRMAN SMITH:

12 Q Gentlemen, we intended to bring this up later,
13 but we're afraid it just might get overlooked:

14 If any aspect of your original testimony in the
15 construction permit proceeding requires, in your view,
16 modification, would you bring it to our attention whenever
17 you think that it would be an appropriate time? But we want
18 to welcome you to do that.

19 If there is anything about your original testimony--
20 I think that somebody did note one correction in the prepared
21 written testimony -- but we do invite you to bring to our
22 attention any modifications that you have in your original
23 testimony.

24 DR. LEEDS: And, in particular, with respect to
25 any conclusions that you might have about the capability of

wel 16

1 the Licensee to operate and construct Shearon Harris Nuclear
2 Plant, realizing that a year and something has passed, and
3 events may have occurred which might lead you to modify or
4 to change, in any way whatsoever, or any new things that may
5 have come up in the time period.

6 Is it clear what we're asking?

7 WITNESS DANCE: I realize what you're asking, but
8 let me ask you a question:

9 On the dissenting views that we have presented in
10 this current testimony, we do not need to revise it for that,
11 right?

12 DR. LEEDS: If you revise any -- new facts that
13 are presented -- if they have changed your mind on anything,
14 we want to know.

15 WITNESS DANCE: Very good.

16 DR. LEEDS: And I didn't necessarily want to hit
17 you with that question and you not have time to think about
18 it, so I don't want the answer now. We want to get the
19 answer later, but we want to know if anything has happened
20 since either the previous testimony in October of 1977 or
21 since this testimony was prepared which would change any of
22 your conclusions. We want to know what the changes are, and
23 what the reasons are, what were the facts that caused you to
24 make those changes.

25 So we want this record complete when we shut it

wel 17

1 down, as of the date we shut it down.

2 WITNESS DANCE: I understand.

3 BY DR. LEEDS:

4 Q I'd like to make sure we've given each of you who
5 were interviewed in that I&A report an opportunity -- I think
6 we did -- but I think Mr. Brownlee and Mr. Dance wanted to
7 have a chance to review it -- and I want to make sure that
8 we give you an opportunity to tell us if there's anything
9 you disagree with in the report they made, or anything you
10 want to add, in any shape, form or fashion, feel free.

11 BY CHAIRMAN SMITH:

12 Q That is a matter of open business, that you wanted
13 to wait until after the recess to respond to questions on it.

14 Are you ready?

15 A (Witness Dance) I'm ready to respond.

16 Q Would you please?

17 A I have a few corrections.

18 Let me make a general statement. If I were
19 writing the testimony, I'd use some different words, but I'll
20 make the changes so that it's somewhat compatible.

21 DR. LEEDS: If you want to change any words, just
22 tell me, because I want to listen to them.

23 WITNESS DANCE: Beg pardon?

24 DR. LEEDS: If you want to make changes, let me
25 know.

wel. 1.8

1

WITNESS DANCE: The testimony is on pages 90 to 95 of Volume III of the interview section.

2

3

CHAIRMAN SMITH: All right, this is Board Exhibit 11.

4

5

WITNESS DANCE: On page 91, in the second paragraph, at lines 5 and 6, the name Wessmen appears. That ought to be Wessman.

6

7

8

The same correction is in paragraph 3, line 3. His name is used three times on that page.

9

10

We are talking about the same man that's at this hearing today.

11

Madelon file

13

14

15

16

17

18

19

20

21

22

23

24

25

Madelon 1
LWS 2WEL
c8 mpbl 2

3 Still on page 91, the second paragraph, the 16th
4 line from the top of the paragraph, under the words "the
5 plant was experiencing", I'd like to change that to "the
6 plant had experienced".

7 In the same paragraph, line 19, the words
8 "management attitude" I would like to change to "management
9 advancement and geographic location".

10 BY CHAIRMAN SMITH:

11 Q I'm sorry, I just didn't follow you.

12 A (Witness Dance) It's the fourth line from the
13 bottom of that second paragraph.

14 Q Okay.

15 A Change the word -- delete "attitude", insert
16 "advancement and geographic location".

17 On page 92, in the first paragraph, in the
18 seventh line, make the sentence read:

19 "Dance advised that he did not recall
20 Cantrell mentioning the possibility...."
21 and then go on from there.

22 The last paragraph on page 92, the fourth line,
23 beginning with "Minimal", include the word "additional".

24 Q Include the word "include"?

25 A Insert the word "additional".

Q Between "minimal" and "input"?

A Yes.

mpb2

1 MR. REIS: Excuse me.

2 Can I have that paragraph with the last word?

3 DR. LEEDS: The last was on page 92, the fourth
4 line from the top of the paragraph.

5 WITNESS DANCE: On page 94, the seventh para-
6 graph, the second line, after "North Carolina" include
7 "to arrive", "to arrive the beginning of the week" the
8 sentence would read.

9 Also on page 94, the first paragraph, the
10 third line, delete the word "naked".

11 BY CHAIRMAN SMITH:

12 Q Is that it?

13 A (Witness Dance) That's it, sir.—

14 Q Mr. Dance, are these corrections --

15 A I don't think they change the meaning of the
16 testimony. They do not really change the meaning of the
17 testimony.

18 Q But my question is:

19 Do these corrections bring the reported inter-
20 view more into line of how you recall the interview being,
21 or after you've had a chance to study it, what you believe
22 to be a more accurate expression of fact?

23 Do you understand the difference? I mean, did
24 the auditors from the Office of Inspector and Auditor quote
25 you directly, but upon reflection you believe that a better



7
8
9
10



11
12
13



mpb3

1 expression of accuracy would be the corrections you've made,
2 or in the first instance, did they quote you inaccurately,
3 or both?

4 A I think maybe both -- well, I hope both. I
5 think there was some paraphrasing that was made. I think
6 there were some words that I didn't use.

7 Q Of course, I have misstated it because they
8 don't purport to quote you anyway. They say they are
9 paraphrasing.

10 A That's right.

11 Q Is that it, sir?

12 A Yes.

13 Q Well, let me see. You have another portion of
14 the testimony too, don't you? Isn't there a follow-up
15 interview?

16 No, I'm mistaken about that.

17 A No, I had no follow-up.

18 Q Mr. Brownlee, do you have corrections to make?

19 A (Witness Brownlee) On page 96, the bottom
20 paragraph. I think in the paraphrasing we state here that:

21 "Brownlee stated that while he was on an
22 inspection of Shearon Harris it was decided by
23 Hugh Dance, who was preparing the operations
24 portion of the testimony, and Charles Barth,
25 the responsible Office of the Executive Legal

mpb4

1 Director Attorney, that joint testimony would be
2 prepared."

20

3 If we were checking dates, and we did not do it
4 at that time, I think our conversation went that I thought
5 that I was on Shearon Harris, but I did not check travel
6 dates or anything of this nature. I was either at Harris
7 or one of the other sites.

8 But in light of the way that it's stated here,
9 I was somewhere, I agree.

10 Also, the same below. When we were doing the
11 work between trips, and between Dance and myself, we were
12 making the preparations and getting it together. If we
13 checked dates and all, I may be hard-pressed. I was out of
14 the office. In that light, it is correct.

15 And that's all.

c9 16 CHAIRMAN SMITH: We propose a break until one
17 o'clock, if that meets the approval of the parties.

18 (No response.)

19 CHAIRMAN SMITH: All right.

20 We'll adjourn until one o'clock.

21 (Whereupon, at 11:45 a.m., the hearing in the
22 above-entitled matter was recessed, to reconvene at
23 1:00 p.m., this same day.)

end

Madelon

RB flws

2a)

25

abi

AFTERNOON SESSION

(1:00 p.m.)

1
2
3 CHAIRMAN SMITH: We have several preliminary
4 points before we begin taking testimony. One is that it is
5 clear that this hearing is not going to be concluded by what
6 I had thought perhaps might have been as early as Thursday
7 evening, so therefore, we want to share with the parties
8 what we think would be a logical schedule for the balance of
9 the hearing.

10 We have reservations to leave here Friday after-
11 noon, so we would plan to have evidentiary hearings Friday
12 morning until eleven o'clock or so, eleven-thirty. Both
13 Mr. Bright and I have commitments in Washington, D. C. Monday
14 morning and Dr. Leeds has a commitment back at the university
15 for Monday, so we intend to resume the hearing on Tuesday
16 morning of next week, as necessary.

17 In the Notice of Hearing it was pointed out if
18 the hearing extends to the second week it would be in the
19 Grand Jury Room. This is because in making the preparations
20 it was the only thing we could nail down. The Clerk of the
21 Courts tells me that that's not a very good hearing room at
22 all; it would accommodate almost no members of the public,
23 and we would not be comfortable, so he's going to consult with
24 us on Friday to see if he can do some rearranging with the
25 activities that are scheduled for the two courtrooms to

ab2

1 accommodate us.

2 In the meantime, Dr. Leeds was walking around
3 during luncheon and he noticed in the Department of Agricul-
4 ture a sign that says a hearing room. We just wonder if any-
5 one is familiar with that hearing space.

6 DR. LEEDS: In the Old Courthouse over by the
7 Mall area.

8 MR. ERWIN: I'd suggest that there's a large
9 auditorium in the Highway Department Building which is on
10 Capitol Square which is two blocks west of here, which would
11 be a very appropriate place. It's a room larger than this,
12 and it's frequently unused.

13 CHAIRMAN SMITH: But is it designed for hearings?

14 MR. ERWIN: It's an auditorium, so you could put
15 tables in. It's not a hearing room.

16 MR. JONES: Mr. Smith, excuse me. We have had
17 one hearing in that auditorium before the EPA and it was a
18 very awkward situation.

19 MR. ERWIN: What other suggestion would you have?

20 MR. JONES: I don't have very many. The State
21 Administrative Office I guess might have a-- There are a
22 number of hearing rooms around town. It's must a matter of
23 whether they can be made available.

24 MR. ERWIN: As a matter of fact Mr. Myers men-
25 tioned on Tuesday that he might check with the Utilities

WRB/eb3

1 Commission because they have a large hearing room, a new
2 hearing room, and it may very well be that there is no hear-
3 ing scheduled for that room.

4 MR. GORDON: They have a standard staff meeting
5 and go over different things on Monday, but I can see whether
6 it's available for Tuesday. But you're not going to be here
7 Monday anyway.

8 CHAIRMAN SMITH: It may be that we are borrowing
9 difficulty. It may be when Friday morning comes the Clerk
10 will tell us that we have good hearing space. But if in the
11 meantime people who could be checking these various resources
12 would do so, on Friday morning we'll know what may be avail-
13 able.

14 We prefer, as a matter of fact I think we will
15 insist that it be suitable hearing space. We're not going
16 to put the parties and the Board to a hearing in hearing
17 space which is not adequately controlled and suitable for
18 easy participation by the parties.

19 MR. GORDON: This hearing I think, Mr. Chairman,
20 would be suitable.

21 CHAIRMAN SMITH: That will be fine. If you can
22 inquire about it as a contingency, then we will address the
23 problem Friday morning.

24 MR. JONES: Mr. Chairman, one other place you
25 might inquire about -- the Attorney General might have

WRB/ab4

1 better luck inquiring than we would. The Division of
2 Environmental Management or the Environmental Management
3 Commission hearing room is probably not used a great deal.

4 CHAIRMAN SMITH: Yesterday we began to circulate
5 to the witness table and down counsel the Tables 4-1 and
6 4-2. This is NUREG-0366 for 1976, and it never came back.
7 So whoever has it, move it along or bring it back to us.

8 Now we're going to submit the Draft for 1977 of
9 that publication.

10 Mr. Reis, do you recall when we requested the
11 draft of NUREG-0366 for 1977, this appears that this draft
12 is final. It was served. But you were going to I believe
13 advise us if any changes had been made in it, or if this
14 survives in file form.

15 That report was due to have been published but,
16 in any event, I am going to assume that this is valid. And
17 could you have somebody inquire to determine if it is valid?

18 MR. REIS:
19
20
21
22
23
24
25



10



11



WRB/wbl 1

MR. REIS: I certainly will.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

CHAIRMAN SMITH: Okay. So we're going to circulate, with some hope of getting this returned, the '77 charts from NUREG 066. Then when they both come back we will officially notice them and ask that they be bound into the transcript.

In view of the Staff's motion this morning concerning oral limited appearance statements and the implication attendant to that motion that the Board has erred in not receiving oral statements, we believe that it would be appropriate for the record to demonstrate the circumstances which prevailed when we made the determinations which we made yesterday.

To review: At the outset we announced we had not invited the public to make oral statements; that we would receive written statements, and upon a determination that the written statements were sufficiently restricted to the relevant issues we would, time considered, we would consider the possibility of allowing those statements to be made orally.

As it turned out, the events of the day in several respects made that virtually, in our view, impossible to provide that opportunity. And the events are these:

After that statement was made a group of people, an apparently cohesive group, came into the hearing room and

wb2

1 there was an interruption by one of the members of that
2 group, at which time we recessed. And we asked for the
3 United States Marshal to take an interest in the activities
4 in the room. As I indicated, in my view there were about
5 twenty-five people.

6 The United States Marshal did indeed take an
7 interest in the activities in the room. And he conferred
8 with Chief Judge Larkins on the telephone, he being out of
9 town.

10 Judge Larkins summoned me to the telephone,
11 and first he wanted to know by what authority -- who am I
12 and by what authority am I occupying his courtroom. And
13 that's a pretty good question. And we satisfied him as to
14 that.

15 But he also observed that he had reports that
16 there were demonstrations brewing in the hearing room. And
17 I think that was correct. By that time most of the people
18 who came in had put gags around their mouth as some type of
19 indication of displeasure with the Board's activities. And
20 based upon my experience and the experience of the Board
21 members, we did not believe that it was possible to maintain
22 decorum in this hearing room and, at the same time, present
23 an opportunity for oral limited appearance statements. This
24 is based upon experience we have each had in other hearings.
25 And I'm convinced that that was correct.

wb3

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Moreover, Judge Larkins admonished me that unless we are able to maintain the same decorum that he would be able to maintain in the hearing room, we could not conduct the hearing in his courtroom.

The Marshal emphasized that he wants us to be prepared -- he wanted us to be prepared to recess the hearing for the day in the event there were any disturbances, and we told him we would very much like to be able to continue the hearings, that the issues are important.

Therefore we did not interrupt the hearing to take oral statements at that time. Furthermore, it wasn't until we recessed for the evening that we had an opportunity to read the oral statements to determine who was making, or proposing to make a statement which would be sufficiently within the issues. Error that may be; however, the decision-- but I don't think it was; I think it was a responsible decision. Moreover, the decision was made from the Bench at a time when decisions have to be made, and they cannot be made after an evenings' reflection.

Does anybody have any additions to those observations, or corrections?

MR. REIS: The only thing I would like to say is my motion was not premised on any error. I was asking the Board to re-exercise, or consider again the exercise of its discretion. Exercise of discretion one way or the other, of course, is not error.

2A2 wb4 1 Whereupon,

2 CHARLES E. MURPHY

3 VIRGIL L. BROWNLEE,

4 FRANK J. LONG

5 and

6 HUGH C. DANCE.

7 resumed the stand as witnesses for and on behalf of the
8 Regulatory Staff and, having been previously duly sworn,
9 were examined and testified further as follows:

10 EXAMINATION BY THE BOARD (Continued)

11 BY CHAIRMAN SMITH:

12 Q I address this to Mr. Dance in particular:

13 Would you please refer again to Appendix B to
14 the testimony of Panel 1.

15 I want to explain the purpose of my questions
16 narratively so that you know the context of the answers.

17 One of our responsibilities is to re-assess the
18 original testimony and evidence in this case and re-assess
19 the significance of the material which was not included in
20 the testimony.

21 As the examination established yesterday,
22 Mr. Cantrell made more visits to Unit 2 than anyone else, and
23 to Unit 1 than anyone except Mr. Sullivan. And the question
24 that I'm asking is to determine what his opportunity to
25 observe was, in your view, and his opportunity to arrive at

1 a valid judgment was, not the validity of his judgment but
2 the opportunity to arrive at a valid judgment.

3 So the question is: Mr. Cantrell, I think you
4 testified, was the principal inspector. Is that right,
5 Mr. Dance?

6 A (Witness Dance) That's correct.

7 Q And he is a multiple-disciplinary inspector?
8 Would that be correct?

9 A I think that's proper.

10 Q And many of the other inspectors here have a
11 single discipline?

12 A That's correct.

13 Q Mr. Sullivan, for example, what is his discipline?

14 A Mr. Sullivan is also a project inspector, similar
15 to Mr. Cantrell.

16 If I may add, Mr. Sullivan assumed the project
17 responsibility when Mr. Cantrell was replaced. Mr. Sullivan
18 replaced Mr. Cantrell.

19 Q Oh, I see. So they are not coincident in these
20 inspections?

21 A That's true.

22 Q All right.

23 Then to save time, isn't it clear that on many,
24 many visits to Brunswick, Mr. Cantrell had the best oppor-
25 tunity to observe its operations?

WB/ab2

1 A I'd say that's correct.

2 Q Is there any doubt about that? If there is,
3 please tell me what the doubts may be. There's no use beat-
4 ing this point to death if you agree and the panel agrees
5 that he had the best opportunity during the period of time
6 of his inspections to observe these operations.

7 A As one individual, he did, yes.

8 Q As a matter of fact is there any other individual
9 employed by the NRC who had a better opportunity to observe
10 the operations of Brunswick?

11 A No.

12
13
14
15
16
17
18
19
20
21
22
23
24
25
2a End WB
Madelon fls.

Madelon 1
lws 2a2
c4 mpbl 2

Q That's from the point of view of the reach of the disciplines and the frequency of visits, would that be correct?

A What was your first point?

Q Well, both from the point of view of the broad discipline that he covered, the unmultiple discipline inspection, and the frequency of visits, this is true?

A Yes, that's true.

Q Now the general panel testimony yesterday was that comparisons between plants is a difficult thing, that it's hard to do because it is hard to have standards. And I don't recall specifically that you supported that point of view, but is that pretty correct?

A That is our point of view.

Q And that suggests to me, then, that Mr. Cantrell's view of the operation at Brunswick inasmuch as it cannot be contradicted by observations at other plants, is even that much stronger.

That's a rather obscure question. I have to work with this because the problem I'm having is the testimony is that it is difficult to compare one plant with another. Therefore Mr. Cantrell's observation with respect to Brunswick cannot be gainsayed or contradicted based upon experience with other plants. Is that true?

Well, let me be more direct --

25

mpb2

1

A I'm not trying to contradict his statements.

2

I did not accept one of his recommendations, but I'm not

3

contradicting any statements.

4

Q Well, I'm going to ask you about that.

5

I'm trying to establish how his opportunity to

6

observe, his opportunity to arrive at a judgment.

7

A He had the opportunity, yes.

8

Q And I'm also trying to establish the validity,

9

the opportunity he had to make a valid judgment. And let

10

me be more direct:

11

You could not say, Well -- you didn't say; I'm

12

just giving you an example -- you cannot say, Well, Mr.

13

Cantrill, I don't agree with your judgment at Brunswick

14

because my experience at other plants leads me to a contrary

15

decision.

16

Could you say that, consistent with your testi-

17

mony that plant to plant comparison is a very difficult

18

thing?

19

A I'm not wanting to moderate his views to any

20

other plant.

21

That's not what you asked me?

22

Q No, that's not what I asked.

23

I'm saying that who in the hierarchy of the

24

Nuclear Regulatory Commission, considering the fact that

25

plant to plant comparison is difficult, can take the person

mpb3

1 who has the best opportunity to observe, the best opportunity
2 to arrive at a judgment, and say Our overall experience
3 with all plants leads us to reject your judgment. Who in
4 the hierarchy of the NRC can do that?

5 A Well, I respect his judgment. I think if
6 someone rejected his judgment it should be discussed with him.

7 Q Well, now I'm going to come to this later.
8 My point -- and I'm taking blame for not getting good
9 questions and answers because I'm having trouble articulat-
10 ing this question. I'll concede that. But I will come to
11 that later.

12 What I'm talking about right now are two facts,
13 controlling facts prevail, two controlling circumstances
14 prevail:

15 Mr. Cantrell has the best opportunity to
16 observe and arrive at a judgment. Plant to plant compari-
17 sons are difficult and cannot be made, well, easily.

18 Put these two facts together and tell me under
19 what circumstances his judgment can be superceded by the
20 judgment of someone else. Are those two facts even related
21 to each other? Maybe they're not.

22 A Well, I'm having trouble answering the question
23 of who should supercede his judgment, if anyone.

24 Q Does the fact that it is difficult to make
25 comparisons from one plant to the next give greater weight

mpb4

1 to the judgment of the person who has experience at a
2 particular plant, such as Mr. Cantrell at Brunswick?

3 A I think the experience at a particular plant
4 and the circumstances around that experience prevail.

5 Q Now I'm going to, Mr. Dance, during the course
6 of the examination you're not going to be left hanging like
7 you seem to be now. You're going to have every opportunity
8 to explain.

9 But I'm just trying to establish a point at a
10 time. And we'll get back to your points.

11 As a matter of fact, it may be a good time to
12 bring this up:

13 In a person in your position, you're called
14 upon from time to time to do as you did preparing the
15 testimony to consider the views of different people and
16 to evaluate those, and you have to exercise some discretion
17 as to which views you include, which views you don't, and
18 it's a judgment matter. That's pretty much what your
19 testimony has been, is that right?

20 A Yes.

21 Q In making that judgment, it seems to me that the
22 easier thing for you to do, the easy thing, would be to
23 throw everything out.

24 A Oh, I agree with that.

25 Q And that way you wouldn't be here today.

MPB/eb1
fls mpb4

1 A Yes, that's right.

2 Q It would save a lot of problems.

3 . So what I'm getting at in this point, it would have
4 been easier administratively, it would have saved difficulty
5 for you, if you had just copied what he had to say and threw
6 it in the testimony and let things happen as they would. But
7 it was the exercise of your professional judgment that that
8 was not the correct thing to do. Is that right?

9 A That's right.

10 Q So did you make a judgment away from what you might
11 call your immediate immediate selfish interest?

12 A No, I don't think I made a-- I follow your reason-
13 ing but I think that is mischaracterizing it.--I wasn't
14 considering my own personal interests. I was trying to make
15 a judgment for the construction permit hearing.

16 Q And your personal interests do not enter into it
17 one way or the other.

18 The point I'm trying to make is it seems to me
19 that if you had just followed along-- From what I know about
20 the case, if you had followed the bureaucratic approach of
21 covering yourself at all times, you would have thrown every-
22 thing in that came along. Is that correct?

23 A Oh, I agree. And hindsight tells me that.

24 Q Well, I think we've all in government learned this.

25 A Yes.

4.102

Beb2

1 Q And when you made the judgment--- I'm showing you
2 easy ones. And when you made the judgment to exclude this
3 testimony or his notes, you did not take the easy course,
4 did you?

5 A That's right.

6 Q And you did not take the defensive course.

7 A But I did have other inputs, but I can agree with
8 that.

9 Q I can perceive no motive in everything I've read
10 in this case that you might have other than exercising your
11 concept of your responsibility when you excluded certain
12 conclusions from Mr. Cantrell. Is that right?

13 A That's correct.

14 Q Now could I have observations from the other gentle-
15 men on the panel who know this business, and could you comment
16 upon this exchange that I've had with Mr. Dance? What do you
17 think about this?

18 A (Witness Long) Yes, I'd like to say one thing.

19 I wonder if perhaps the idea has come across that
20 we rejected the problem as a problem. I don't think that we
21 have done that. We've said many times that we recognized
22 problems, this being one of numerous problems that have been
23 encountered of one type or another in the management systems
24 area. The method of resolution or final disposition of that
25 problem is where I personally had a problem.

1 In other words, it would assume that the only way
2 that I could accept or that I believed the problem would be
3 best resolved would be though a permit condition that would
4 require something a number of years down the road. I did not
5 consider that as at all necessary because I had never seen the
6 need for it before although I had seen the same problem at
7 other facilities pending construction permits and eventually
8 facing operating license hearings..

9 So I don't think that any of us has taken a posi-
10 tion that that was not a problem. I don't believe we have
11 said that. There were problems--

12 Q This is getting off in the area --

13 A But I mean the resolution of it, I believe we have,
14 particularly in the operating plant, I took the position
15 myself that most of these problems that we have several years
16 minimum to resolve, so we saw no reason to believe they
17 wouldn't be --

18 Q Mr. Long, you're anticipating me. The Board is
19 going to have questions later on about the testimony and the
20 original testimony. I'm trying to establish a very narrow
21 point right now, and that is to determine if there are any
22 factors which the record does not demonstrate which makes it
23 difficult or hard or easy to include or exclude information,
24 and I made an observation that Mr. Dance agreed to, that the
25 easiest approach would have been to throw everything in, and

MPB/eb4

1 we'll get to the specifics later on.

2 I just wonder, Mr. Murphy, in your experience as
3 a --

4 A Could I just make one more comment?

5 One thing on our method, it has been stated that we
6 never really have had a very concrete or uniform procedure for
7 the preparation of testimony, and my personal opinion has been
8 that we make the decision at some point to support the permit
9 so when we develop the testimony it's generally, I think in
10 nearly all cases it clearly would lean toward the support --
11 towards support of the applicant's request for a permit.

12 So we have not attempted, and I don't remember too
13 many instances, if any, where adverse information appeared in
14 the testimony. In other words, we worked-- I think that we
15 probably tried, subconsciously perhaps in some cases, to work
16 around by supporting another approach than highlighting the
17 dissenting or the many opposing views of certain things, how
18 to resolve -- the best way to resolve the problem and put--

19 In other words, in weighing all the information we
20 had, we still supported the permit or the issuance of it
21 because those things in favor outweighed, far outweighed the
22 problems that we were aware of, and our knowledge of pending
23 resolution of the problems.

24 So I myself, in writing testimony, I very rarely
25 ever tended to discuss excessively the problems that I saw;

MPB/eb5

1 I only discussed those problems that I saw no immediate reso-
2 lution to, or those that I didn't recognize had an immediate
3 resolution.

4 Q Are there any other comments on that?

5 A (Witness Murphy) Mr. Chairman, I do not necessarily
6 agree with Mr. Dance, that the project inspector by his being
7 at the site more often than others, necessarily is the one
8 person with the best knowledge.

9 I can easily foresee that the section chief, with
10 all of the inputs that he has, would have a far better under-
11 standing of the over-all operation of the site than would some-
12 one there, based just on presence at a site.

13 He would also have a better understanding, in fact
14 should have demonstrated it by being in the position, that he
15 is more aware of the various regulations and the commitments
16 and requirements in the generic sense, and should be in a
17 better position as to how a licensee is performing and also
18 in which direction the licensee is going.

19 Q Now the specific question that I was trying to
20 get to, and perhaps there is no answer available, is what
21 are the practical pressures upon a person in Mr. Dance's
22 position when it comes to a judgment to be made to include or
23 exclude viewpoints.

24 A Outside pressure, sir? I know of none. I have
25 never experienced any myself, to include or exclude positions

978

MPB/ab6

1 from testimony.

2 I fully recognize that everything come to the
3 public record. I believe that the people that testify
4 at the hearings realize that it comes to the public record
5 and there is nothing that keeps anyone from seeing if a mis-
6 statement is made by bringing it to the attention.

7 We have gone into hearings with unresolved items.
8 You are probably more aware of that than I am, and that we
9 are seeking the resolution of the items at the time as to the
10 specific cases.

11 This particular problem I would not forases as
12 being any worse or any less than some that may have or may not
13 have gone before pravious Boards.

14 Q Let me give you an example:

15 As the Board presides over a hearing, evidence is
16 presented and objection is made and we have to rule in or
17 out. When in doubt, what do we do? We allow it in.

18 It may be a more proper exercise of responsibility
19 to be very, very careful and only admit that which is correctly
20 in, but very often, I think everyone will observe that the
21 Presiding Officer says, "Well, I don't know. Let it in."

22 This is the point I'm trying to --

23 A Yes, sir, I agree with your point, too.

24 Q And I think that we make a conscious effort if
25 in doubt, throw it in.

mpbl
flws
eb6

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Q That's the exact point that I'm trying to make.
So if any pressure exists his inclination would
be to allow it in.

A I would think so.

Q Unless his professional judgment tells him that
it should be excluded.

A That it is not warranted.

Q That is my question.

Madelon
mpbl

1 I'm trying to determine what biases there may
2 have been, and it seems to me that if his office functions
3 like the offices I know about, when in doubt you let it in.

4 A It would have been much easier, of course --
5 other than for typing load -- it would have been much
6 easier to identify every bit of trivia in the record, and
7 there is much of it.

8 Q Okay.

9 BY MR. LEEDS:

10 Q Mr. Long, did I understand you to say that once
11 you have made a determination -- I think you used the word
12 "support" an applicant -- that you might tend to emphasize
13 the pluses and de-emphasize the minuses, is that right?

14 A (Witness Long) I don't think I said de-
15 emphasize the minus; but when we collectively agree that
16 there are no conditions which would preclude the issuance
17 of the permit, it's at that time that we agree. We work
18 with the lawyers then and licensing people and others and
19 we proceed with the hearing and the preparation of testimony.

20 In other words, that would be the time to
21 object to the permit if we had anything -- it doesn't mean
22 we have no problems and everything is completely clean. It
23 means, to me, and I'm sure to the others, that there were
24 no major outstanding problems that we did not foresee the
25 ready resolution of or that would stand in the way of the

mpb2

1 permit. So we would go ahead and prepare testimony. And
2 much of the testimony that I have participated in has
3 included many open items, a long list of items that must be
4 resolved.

5 At this stage we have no laundry list like that.

6 Q Well, let me get back to the buckets.

7 I've got two buckets. One bucket is full of
8 plusses and one bucket is full of minuses. And you have now
9 decided that you're going to put them on a scale. The
10 plusses bucket is a lot bigger than the minus bucket in some
11 way. You have now decided it is important to the applica-
12 tion.

13 What do you view your role is when you say you
14 support the application?

15 A Well, it really means that we would not proceed
16 to hold up the process because we feel like all issues that
17 are still open either would be brought to the hearing stage
18 or would be resolved prior to the issuance of the permit.
19 These things would all be identified and listed in some way.

20 Q If I asked you as a Board member what's your
21 evaluation of the aApplicant, and you've decided to support
22 this Applicant, how many of the minuses will get thrown into
23 the testimony, a lot, a few?

24 A In the original testimony I would expect there
25 would be a moderate, few to moderate number of minuses.

mob3

1 Q Do you view your role once the Region II, or
2 whatever entity you're talking about has decided to collect-
3 ively or collegiately or however to support an applicant, do
4 you view your role, then, as an advocate of that application?

5 A No. I think our support is about the NRC's
6 process of licensing. We have no authority to not support
7 a license if they meet the requirements. That's the way I
8 look at it.

9 Our job is to verify that all of the requirements
10 that we are responsible for are met or will be met, and that
11 we feel confident about this.

12 Q But I'm not talking about the requirements that
13 you're responsible for.

14 The problem I'm running into -- and I tried to
15 get over this on page 28 -- many of you have anticipated
16 the stuff we'll get to when we get to Panel 3, but you're
17 not on panel 3.

18 The role of the I&E, when we ask the question,
19 you know, what your feelings or your opinion is about this
20 applicant, it is not a question of whether or not he reads
21 the specific inspection points, but it was a feeling for what
22 was known about this applicant in terms that could enable
23 this Board to fulfill its duty to predict what the applicant
24 would do in the future, and that's a long involved statement.

25 But our problem is to make the prediction that

mpb4

1 someone in the I&E reports characterizes as difficult to
2 make in six years in the future. We were looking for help.
3 And that's why the question was asked.

4 A In my case, I think many of the people for at
5 least 20 years who are managing the CP&L Company today, I
6 didn't work with them but I inspected it a lot. And I
7 worked with that contract in the past and worked with them.
8 Many of these people who were engineers and working level in
9 those days are now managing CP&L. I have that confidence.

10 I know that at the time in the past that I have
11 seen their performance with problems, I have also seen their
12 willingness to resolve the problems and work them out. I
13 have never been disappointed that I know of. We were concern-
14 ed at times. Maybe they didn't go fast enough occasionally,
15 but we have no record of continued dissatisfaction with the
16 resolution or corrective action on problems once identified.

17 Q Mr. Murphy told me this morning we were
18 shuffling people around quite a bit, and it sounds like
19 you didn't get shuffled. Is that true?

20 A I don't believe that he really meant that we
21 shuffled branch chiefs around. I have only held two jobs
22 since I've been in NRC. One is construction, most of the
23 time, and the rest of the time it's operations branch chief.

24 And I believe Mr. Murphy was a testing branch
25 chief initially and then construction.



1000



1000



mpb5

1 Q Would it have been better for you to, you know,
2 have visited California and the climate might have been
3 different. I won't say "better"; it might have been differ-
4 ent.

5 A We're not anxious for that kind of rotation
6 effort yet. There are too many of us.

7 It's been mentioned, but I wouldn't personally
8 endorse it.

9 Q But you certainly rotate the inspectors. You
10 don't let them sit at a plant more than a couple of years,
11 three years, something like that?

12 A We do that because they are the most directly
13 involved with the plant that they're assigned to. The
14 project inspector is on a plant. All other inspectors work
15 on all plants.

16 Q After this long period of experience with them,
17 have you formed an opinion that would be very difficult to
18 shake? If a principal inspector came to you, would you tend
19 to discount his --

20 A No, I don't think so. I think we have pretty
21 intensive enforcement programs. And I think the record
22 will show that when the need for enforcement is demonstrated,
23 we do enforce.

24 Q But if he came to you and said, I don't think
25 they really are capable of doing X, things have deteriorated,

mpb6

1

would it shake you from your position?

2

3

4

5

A I think personally in this case I would disagree with the statement from a number of people, though I've only heard it from one person out of about 30 people who have been involved.

6

7

8

9

While I very strongly respect the opinions of the individual, I think I know what the individual -- as far as I'm concerned, I understood what his concerns were. Looking back on it now, I understand it even better.

10

11

12

13

14

I think his concerns have been alleviated long ago, as I would have predicted in the past. I don't believe the individual has the concern today because of the improvement of conditions which I and others predicted previously would be the case.

15

16

17

18

19

20

We think that they are getting better, that they are attacking problems, that their management is strengthening itself and looking for ways to handle these problems. I think it's true across the board. We don't have too many cases that I know of where there isn't this effort. I think we'd be in real trouble if there were very much of that.

21

22

23

24

25

BY CHAIRMAN SMITH:

Q Gentlemen, on page 27 of the testimony of Panel 1, where you say:

"...it is incumbent upon the inspector to make his views known to IE management."

mpb7

1 Now the testimony in this proceeding is that --
2 well, Mr. Cantrell felt that the tech specs for Brunswick
3 were being minimally met, perhaps, but the implications of
4 them or the intentions of them were somehow not being met,
5 or perhaps the problem may have been that the tech specs
6 did not meet his concept of what tech specs should have been,
7 I don't know.

8 But whatever the problem is, is this the type
9 of view that should be made known by an inspector to I&E
10 management?

11 A (Witness Dance) Yes, it is.

12 Q And did this happen -- I mean, did this happen
13 within the context of the answer on page 27? --

14 A Mr. Cantrell has identified his view in many
15 memorandums.

16 Q I'm speaking right now about his concern that
17 -- with respect to the number of SROs, Senior Reactor
18 Operators, licensed senior reactor operators at Brunswick,
19 that it did not seem to be meeting the implications of the
20 tech specs which said that a certain number were desirable,
21 nine out of the top management, when in fact at the time
22 there was only one, and that his concern was this does
23 not meet the implication or the spirit of the tech specs.

24 The question is:

25 Is that one of the views that an inspector should

mpb8

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

make known to I&E management?

A It certainly is.

Q And was that done within the context of this testimony?

A He did address that question in a memorandum.

Q And you ordered an inspection?

A Yes, we did.

Q And then after you had the inspection, you acted upon it?

A Yes, and prior to the inspection we received interpretation from our headquarters on that very issue.

Q So as far as you're concerned, the system did work?

A Yes.

nd
Madelon
2B flws
WRBloom

B WRBloom
f.s Madelon
wbl 2

Q Now would you tell me, please, about tech specs?
I'm probably the only one in the room who doesn't know the
answer to this . But we're speaking of technical specifica-
tions. Now how are those formulated? Who formulates them?

A The Nuclear Regulatory -- NRR.

Q Are they a part of the license?

A Yes, they are.

Q How are they modified?

A They are modified by NRR either at the request of
I&E or at the request of the licensee, or on NRR's own
initiative.

Q Mr. Murphy, I appreciated your clarification of
Mr. Dance's statement about opportunity to observe. But it
just occurred to me you pointed out that the supervisor
of the inspector has input from all the disciplines.

A (Witness Murphy) That is correct, sir.

Q And that's true: I hadn't considered that.

But also does not the principal inspector have
input from the other disciplines?

A (Witness Dance) Yes, he does.

BY MR. BRIGHT:

Q Gentlemen, on page 27, down where it says "We in
the Region do not determine the requirements which licensees
are to meet," I'm a little curious. Now you make the further
statement that you are responsible to determine that the

wb2

1 licensees are conforming to the commitments as described in
2 the SAR.

3 A (Witness Murphy) That's correct, sir.

4 Q And, further, "Inspectors do not have authority
5 to impose requirements on licensees."

6 A That's correct, sir.

7 Q I guess what I'm wondering, do you ever make
8 suggestions that, No, you're not meeting these requirements,
9 fellows; why don't you do thus-and-so?

10 I can an inherent flaw in doing that. But I
11 would like to get your--

12 A No, we do not, if you will, act as consultants
13 to the licensees. They are responsible to obtain their own
14 interpretations of the regulations and their own commitments
15 if they have questions.

16 There is much guidance. The regulatory guides,
17 if you will, among other documents that provide guidance to
18 the licensees. If the inspector makes a suggestion as to how
19 something could be accomplished, believe me, the licensee
20 would take that as an NRC view; and quite correctly so;
21 when, indeed, depending on the circumstances and everything
22 else, that position may not be totally correct for all of
23 the situations that you can foresee.

24 Probably the closest we could come to such as
25 that is to indicate that which had been acceptable in other

wv3

1 similar instances as long as we really box in and define what
2 those instances are, so that it is clear.

3 There are many areas that give both the licensee
4 and the inspector problems; reporting requirements among
5 them.

6 Q Well when you say NRR does the review and
7 determines that, whatever their plans are to meet the require-
8 ments, how far down does this go in terms of -- I assume that
9 NRC is vitally interested in the various procedures that the
10 licensee is using to run his plant. Now does NRR go through
11 these word-by-word, punctuation, et cetera, and then I&E
12 gets it?

13 A The requirements for the procedures are estab-
14 lished by NRR, the areas to be covered, the depth of coverage,
15 this type of thing, the training requirements behind them.
16 The detailed review of the procedures is done by I&E inspectors
17 to determine that indeed these procedures do meet the require-
18 ments that have been identified to the licensee and the
19 commitments that the licensee has made.

20 Q So then this, you would say, would be the highest
21 level of advice, or whatever, that I&E gives to a licensee?

22 A I would hesitate to call it "advice."

23 Q I hesitated also.

24 A But we can show, or point out to them those
25 areas in a procedure that do not conform to what has been a

wb4

1 commitment requirement. Generally these commitment require-
2 ments are more specifically defined in the various codes
3 and standards to which they are building a plant. I'm speaking
4 from the construction side.

5 Q Then the bottom line would be that the I&E people
6 don't merely go through some kind of rote, they do have
7 quite a responsibility in interpretation and making value
8 judgments. They're not just following a list--

9 A No.

10 Q --that someone back in Washington set down for
11 them.

12 A No, sir.

13 The document that they basically start with would
14 be Chapter 17, in the instance of quality assurance, of the
15 SAR, and the quality assurance plan that the licensee has
16 developed to meet these commitments, and track it down through,
17 then, to the branches and the split down to the individual
18 craft level procedures, if you will. It's quite complex. It's
19 quite difficult.

20 You can think, probably, of the SAR as the
21 description of what -- of how the work is to be accomplished,
22 the quality assurance plan as being the policy statement, and
23 more definitive instructions on the part of the licensee as
24 to how he is going to implement that program, which has been
25 described. And then we determine that the implementation of

wb5

1 that program is carried out.

2 Q Well I sense that you're addressing mainly the
3 construction side.

4 A That's correct, sir.

5 Q Now how well does this follow insofar as the
6 operating inspector goes?

7 A (Witness Dance) The FSAR that Mr. Murphy was
8 referring to is the primary document during the construction
9 of the plant. At the time of fuel loading, or at the time
10 of licensing the plant the technical specification also comes
11 into play. And that is the primary document where the require-
12 ments for the plant are spelled out.

13 I&E assists, or has an input to NRR during the
14 preparation of that. We have a chance to review that and
15 input our comments to what we think the requirements ought to
16 be in the different areas in that tech spec.

17 It is our instruction, and it's our obligation
18 to our inspector if they see an area any time in the life of
19 a plant that they don't think the requirement is proper, they
20 think other requirements ought to be added, they should bring
21 that forward, and we should make recommendations to change
22 the technical specification as deemed necessary.

23 Q So it sounds to me as if you have much the same
24 sort of responsibility at the operating stage as you do at
25 the construction stage.

wb6

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A Yes.

Q The subject may change a little bit.

A Right.

Q --but the basic work goes on.

A (Witness Murphy) Yes, sir, I would consider them quite similar.

Q Thank you.

CHAIRMAN SMITH: Is there redirect?

Do you want some time?

MR. REIS: No.

Preliminarily I had informed the Board, and had distributed copies of the chronology of inspections at the Brunswick units, and I have not yet given them to the Report or incorporated them in the record. I would like them to be marked and identified to be put in the record as Staff Exhibit 16; or, rather, to be exhibits, as Staff Exhibit 16.

XZXZXZX

(Whereupon the document referred to was marked for identification as Staff Exhibit 16.)



REDIRECT EXAMINATION

BY MR. REIS:

Q Mr. Long, there has previously been talk of LERs and LERs reported on various plants. Is an LER-- Can you compare LERs at one plant to LERs at another plant?

A (Witness Long) I think they could be compared. But I think the only way that LERs-- Are you talking about numerical, or just the significance of LERs?

Q Well the numbers of LERs.

A Well without giving you the numbers, I'd say that the LERs do vary -- they have varied in number between plants in the past quite significantly, basically due to the license requirements for reporting.

For example, the basic reporting requirement for licensee events are included in one of the reg guides which has undergone several revisions and I imagine will be revised further in time. But the older plants, some of them had very minimal, very poorly defined requirements for reporting of these events, and, consequently, few things were being reported.

The wording at one point, I think it is safe to say, was different in almost every technical specification with regard to reporting, and only in the last couple of years I think have they become really uniform.

We were discussing at least one case where the

WRB/eb1
fls wb7

1 licensee actually was required to make no report of these
2 events technically as far as the license was concerned. We
3 have taken the initiative in our region and elsewhere to
4 get more uniformity in the licenses. We have put pressure
5 on the licensees, by whatever means we could, to get them to
6 report to us.

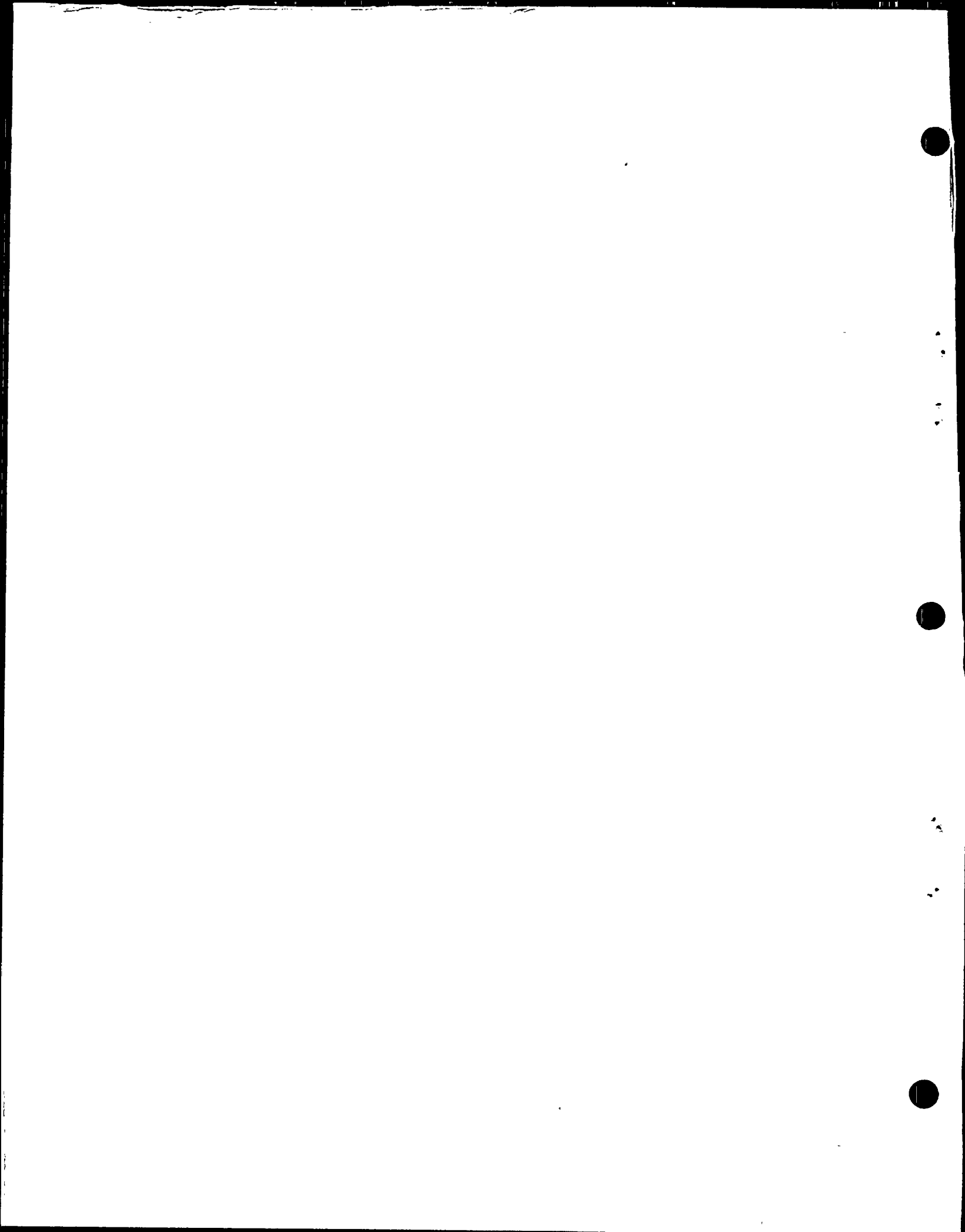
7 In some cases, licensees have overreacted to our
8 insistence on reporting, and we've got many, many reports.
9 In other cases, we have tried to explain to licensees that
10 many of the things they were reporting were not actually
11 reportable by our interpretation of the requirement and they
12 would maybe underreact to that and cut way back on reporting.

13 So that's just about -- in my opinion accounts
14 for the major reason why the wide variation in LER reports.

15 Q Going to technical specifications, do the depth
16 and the stringency of technical specifications vary from
17 plant to plant?

18 A Yes. I think, as we discussed previously, in
19 my opinion the older a plant is, generally I think I could
20 say the less stringent the license technical specification
21 requirements were. Just by measurement of the size, the
22 volume, the content of tech specs alone, they have expanded
23 drastically over the years almost continually.

24 Robinson, for example, is one of the older operat-
25 ing nuclear plants. Brunswick 1 is probably one of the



WRB/eb2

1 later.

2 Q Does the extent and the depth of the technical
3 specifications have any effect on severity or the type of
4 inspections or how inspections are done?

5 A Obviously if the requirements on a plant are less
6 stringent, it is easier for us to inspect purely for com-
7 pliance.

8 One thing that I have found is that inspecting
9 the plant without the more stringent license conditions, our
10 inspectors do come up with more types of things that we feel
11 ought to be included in the license or for which some require-
12 ments should exist.

13 In other words, there really are two things we
14 look for. One is compliance and the other is the need for
15 requirements to which they must comply, for example what we
16 might refer to as safety items for which there are no require-
17 ments, and we take the initiative internally.

18 We have identified many such items and we have
19 taken action internally which eventually ends up in the form
20 of some type of licensing or other requirement on the utility
21 to solve the problem.

22 Q Mr. Murphy, previously in your testimony yesterday
23 I believe you talked about infractions. Can you compare one
24 type of infraction with another?

25 A (Witness Murphy) Even though by the point count,

WRB/eb3

1 no. And the reason, even though a point count level has been
2 established for the term "infraction," in actuality the range
3 of safety significance covered by this defined level varies
4 greatly, and it can be as simple as a person not documenting
5 that he had -- or not performing one simple step in a process-
6 dure to a gross failure to perform an act that, though during
7 the construction phase the safety significance would be down
8 the road, it would still exist as a safety significance.

9 So that fact has been recognized by IB management
10 and steps are underway to further redefine the severity
11 levels of non-compliances, and to provide better definition
12 which would tend to further segregate those matters of less
13 significance from those of more significance.---

14 Q Can you give us an example of two types of in-
15 fractions that would show the differences that you just talked
16 about?

17 A A licensee could receive an infraction from dis-
18 carding some weld rod into a trash can rather than return it
19 to an issue station.

20 That same licensee could receive a notice of
21 violation at the infraction level if the janitor picked up
22 a welding stick and started welding on the primary loop
23 piping, obviously of vastly different safety significance.

24

25

c9

B/ab4

1 Q Mr. Murphy, yesterday you testified on your guide
2 to attempts to design a computer program to rank licensees's
3 performance. Is there any-- And you detailed some areas
4 where you felt that the system was not reliable.

5 In Board Exhibit 3, which is the Licensee
6 Regulatory Performance Evaluation Report, is there a similar
7 discussion and can you identify where it is if there is one?

8 A Yes, there is a similar discussion under Tab 3,
9 page 5, "Summary of Licensee Performance - Evaluation Methods."

10 Q Gentlemen, you talked about the January '78 meet-
11 ing with CP&L on management and you said this was a regular
12 procedure done with various -- the management of various
13 utilities. Can you give us just generally the names of some
14 other utilities that there have also been management meetings
15 with of a similar type to that held with CP&L in January of
16 '78? Just the names of some of the other utilities?

17 A (Witness Long) We have recently held such meet-
18 ings with TVA on the Browns Ferry facility which was one of
19 the old ones; the Florida Power and Light people. We have
20 had a meeting-- With Duke Power Company we have had a similar
21 meeting recently.

22 Q Going to page 26 of the testimony --

23 DR. LEEDS: Mr. Reis, could I interrupt you?
24 I presume you're trying to pick all the spots in the Board
25 notification where it talks about that. Aren't there some

WRB/eb5

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25

other areas?

MR. REIS: I just wanted to highlight that one area at this point. I haven't gone through that thing in real depth either, but I had found a spot where--

DR. LEEDS: I did. There are others.

2b end WRB 5
WEL follows



1 BY MR. REIS:

2 Q Going to page 26 in the testimony, and to follow
3 up some questions of the Board, you say there:

4 "The inspector must support his conclusions with
5 facts."

6 The prior sentence reads:

7 "Prior to the writing of the report the inspector
8 is required to discuss his findings with his supervisor."

9 My question is:

10 What if there's a disagreement between the
11 inspector and the supervisor on what the conclusions are in
12 supporting the facts, how is that handled?

13 A (Witness Dance) It goes up the line.-

14 A (Witness Long) May I also comment on that?

15 We discussed it a little bit. An inspector writes
16 the report. There are some supervisory functions that must
17 be taken care of. We do not rely totally, for example, on
18 the identification of items of non-compliance or the severity
19 levels. These things are generally resolved.

20 At the initial meeting, for example, as soon as
21 he returns, he discusses the findings briefly with his
22 supervisor. This is an advantage in his preparation of the
23 report, because there is mutual agreement and understanding
24 of what the citation, if any, will be.

25 The inspector does not -- is not expected to

1 conclude in all cases finally what the findings were. It's
2 usually that his supervisor will discuss with him and concur
3 in his proposed citation. And that's an important outcome
4 of any inspection, the enforcement aspect of it.

5 A (Witness Murphy) May I point out to the Board that
6 I would like to make a change on page 26 -- identify the
7 change on page 26 that I believe will clarify the meaning?

8 On line 6, the sentence starting, "Prior to the
9 writing..." delete the words, "Prior to the writing of the
10 report." In their stead, insert, "As soon as practical upon
11 return to the office from an inspection."

12 Q Mr. Dance, do you generally supervise the inspections
13 of Brunswick and Robinson, besides supervising the principal
14 inspectors of those plants?

15 A (Witness Dance) I do.

16 CHAIRMAN SMITH: Was that question, "Do you
17 generally supervise the inspections, or the inspectors?"

18 MR. REIS: Well, I --

19 CHAIRMAN SMITH: I just didn't hear the question.

20 MR. REIS: Could you repeat it?

21 (Whereupon, the Reporter read from the record, as
22 requested.)

23 WITNESS DANCE: Let me add to that, Mr. Chairman.
24 There are many inspectors in our office, some in other
25 disciplines. I do not supervise their inspections. However,

1 a project load does specify which areas they inspect.

2 So when you say generally supervise the inspections,
3 we assure that the inspections in certain areas, in certain
4 specialty areas, in addition to the project areas, are
5 completed.

6 So I would like to add that explanation.

7 BY MR. REIS:

8 Q Mr. Long, in your testimony you indicated that if
9 there were problems found with a licensee who was applying
10 for a license for a new plant, or another license, that there
11 were other remedies that could be imposed or brought about,
12 besides the conditioning of future licenses.

13 What were you referring to?

14 A (Witness Long) We have exercised this prerogative
15 many times, and very simply it's additional inspections,
16 special or repeat programmatic inspections in the area that
17 we're concerned about, if we find that that's the best way
18 to get to the problem.

19 We may find that the problem doesn't exist, or we
20 may find that the solution is already underway. And that's
21 the reason for it.

22 Q If a determination was made by you, Mr. Dance,
23 that the license should have been conditioned in this case
24 as recommended by Mr. Cantrell, what are the mechanisms you
25 would have followed within NRC before preparing your testimony?

1 A (Pause.)

2 Q Going to such areas as who you would have spoken
3 to, and such?

4 A (Witness Dance) Well, I would have a couple
5 approaches.

6 I'd either prepare a draft writeup of the testimony
7 and review it with my supervision, or else I would take it
8 to him verbally, both what I intended to do and the basic
9 document, the memo.

10 Q Is a determination to impose a license condition
11 made by your regional office, within NRC?

12 A No. We make recommendations for licensing
13 conditions. We are not the ones to make the conditions
14 themselves. NRR is, the agency.

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

16 CHAIRMAN SMITH: I think you're up next, Mr.
17 Erwin. Do you have any additional cross on the Board's
18 examination or the redirect?

19 MR. ERWIN: Yes, sir, hopefully very briefly.

20 RE-CROSS-EXAMINATION

21 BY MR. ERWIN:

22 Q Mr. Dance, you've been asked by the Chairman about
23 what went into the preparation of your testimony. Let me
24 just ask you to refer to page 126 of Volume III of Board
25 Exhibit 11, which I take to be a copy or a purported copy

1 of a page from the transcript of the 1977 hearing in which
2 you were being asked questions by Dr. Leeds.

3 Let me start on page 125. The line of questioning
4 starts where there's an arrow, at line 18, when Dr. Leeds
5 states, or asks:

6 "And based on your experiences with them in the
7 past on other projects that they are on, do you have
8 any concerns about their ability to manage this plant,
9 or their technical capabilities to run Harris,
10 construct Harris and then run the plant?"

11 And then you refer to the QA.

12 And the question was asked to Mr. Dance:

13 "What is your relation to this?" —

14 DR. LEEDS: The question just before, you said
15 Mr. Dance. I think it was Mr. Brownlee.

16 MR. ERWIN: Okay. I'm sorry. I wasn't listening
17 to you. I didn't hear what you just said.

18 DR. LEEDS: The questions on page 125 I think are
19 to Mr. Brownlee.

20 MR. ERWIN: I see. That's right. I'm sorry.
21 The question that I was trying to get up to, or
22 trying to make the background for the question, is:

23 "Mr. Dance, what is your relation to this?"

24 And your answer is:

25 "I have principal inspectors working for me

1 who are responsible for the operation, inspection at
2 H. B. Robinson and Brunswick."

3 And then the question:

4 "And there is no evidence that you have, of need for
5 corrective action on management capabilities at those
6 plants, or anything like that?"

7 And then you asked Dr. Leeds to repeat the question.

8 Then your further answer is -- rather, he repeats
9 the question:

10 "There is no evidence you have of needs, or lack
11 of technical ability or management capability of running
12 this plant?"

13 And the answer is:

14 "That's correct."

15 My questions are not directed to the preparation
16 of the testimony, but simply to the response to Dr. Leeds'
17 question.

18 Would it not also have been easier . . .

19 Well, first of all, what did you take Dr. Leeds
20 to mean by "evidence?" I'm very curious about that. When
21 he asked you if you had any evidence, what did you think he
22 meant by that?

23 A (Witness Dance) Yes. I took that to mean did I
24 have any other evidence that we needed to bring forward to
25 give a picture of Brunswick management.

1 Q His question was:

2 "There is no evidence you have of need for
3 corrective action on management capabilities at those
4 plants, or anything like that?"

5 He didn't ask you --

6 MR. TROWBRIDGE: Objection.

7 BY MR. ERWIN:

8 Q Your response then was --

9 MR. TROWBRIDGE: I have an objection to the
10 question. You are quoting from the sentence which Mr. Dance
11 asked to be repeated. I think the question should be confined
12 to the sentence that was repeated.

13 MR. ERWIN: All right, it really doesn't make any
14 difference to me.

15 BY MR. ERWIN:

16 Q The question that was repeated is:

17 "There is no evidence you have of needs, or lack
18 of technical ability or management capability of running
19 this plant."

20 And you say:

21 "That's correct."

22 Now, let me make sure that I understand your
23 answer to my earlier question, what you understood Dr. Leeds
24 to mean by evidence, that evidence in that context meant
25 information that you wished to bring forward to the Board for

1 their use.

2 A (Witness Dance) That's what I said to your first
3 question. Let me add that the original testimony, the '77
4 testimony dealt with many problems that Carolina Power &
5 Light had at their plants, many problems with regards to
6 non-compliance, in regards to equipment failures, licensee
7 event reports.

8 It also talked about improvements that had been
9 made at the plant in the line of training, staffing, that
10 I felt that that had already been addressed, and I had no
11 new information to bring forward.

12 Q Now, I'm not trying to badger you, Mr. Dance, I'm
13 just trying to get you to show me what was in your mind when
14 you answered the question.

15 In other words, would I be correct in stating that
16 at the time that you answered the question you did not
17 consider -- and there are only two possibilities here:

18 Either you considered Mr. Cantrell's -- well, I
19 guess there are three possibilities:

20 Either you forgot Mr. Cantrell's memo at the time,
21 or you considered it not to be evidence, or you considered
22 it to be evidence and you answered incorrectly.

23 Now, which of those things was the case at the
24 moment that you answered that question?

25 MR. REIS: I object to the question.

1 MR. ERWIN: I may have --

2 MR. REIS: There's an infinite number of things
3 that could have been in his mind at the time. If the question
4 is asked: What was in his mind at the time, then I won't
5 object to it. But to give him three possibilities.--

6 MR. ERWIN: I'll withdraw the question.

7 BY MR. ERWIN:

8 Q As I say, I'm not trying to badger you. At the
9 time that you answered the question, did you consider Mr.
10 Cantrell's memo to be evidence, to be such evidence as Dr.
11 Leeds was requesting?

12 A (Witness Dance) Well, I was very much aware of
13 Mr. Cantrell's note, but I had no new concerns that had not
14 been addressed.

15 I thought about the question at the time, and I
16 decided I didn't have any new evidence to bring forward.

17 MR. ERWIN: Mr. Chairman, I don't believe the
18 witness has answered the question. I don't wish to appear to
19 be argumentative or badgering the witness. I think I'm
20 trying to be -- I'm just simply curious, and I'd like to get
21 an answer to the question.

22 CHAIRMAN SMITH: In the first place, I would not
23 have been so ready to withdraw your earlier question, because
24 it seemed to me that you had given the perimeters of the
25 possible alternatives, and if that had not been the case Mr.

1 Dance could add what other alternatives there were.

2 MR. ERWIN: Well, I believe so, but I don't wish
3 to appear --

4 CHAIRMAN SMITH: I understand.

5 MR. ERWIN: I truly wish to expedite this. I don't
6 wish to be here any longer than anyone else.

7 CHAIRMAN SMITH: May I suggest, rather than going
8 back and having the question read, and the answer, let's
9 start afresh and see if you can come up with more discrete
10 questions. --

11 MR. ERWIN: I'll certainly try to.

12 CHAIRMAN SMITH: -- that are more susceptible of
13 being answered yes or no, then followed by an explanation.

14 Is that satisfactory?

15 MR. ERWIN: I'll certainly try.

16 MR. LEEDS: Just ask your three possibilities in
17 order.

18 MR. ERWIN: I asked one of them and I didn't get
19 an answer. Okay.

20 I'd like to get an answer to that question because
21 that's really an important one.

22 BY MR. ERWIN:

23 Q At the time that you answered the question that
24 was put to you by Dr. Leeds, do you remember-- Let me start
25 like this:

WEL/wbl 1

2 Do you remember whether, at the time you answered
3 the question put to you by Dr. Leeds, you had Mr. Cantrell's
4 recommendation in mind at all?

5 I mean, you may not.

6 A (Witness Dance) At the time of the question it
7 did cross my mind whether I should say CP&L has not been a
8 trouble-free site as the testimony shows. They have made
9 great strides in improvement in the many different areas which
10 I've just mentioned, and which the testimony reflected, too.
11 So therefore I concluded I did not have any other information
12 to bring forth.

13 Q All right. Let me ask you:

14 Did you think at the time you answered the question
15 of -- or did it cross your mind that you might say, Well, yes,
16 my principal inspector-- You'd just been talking about the--
17 in the very last sentence, the very last answer you'd given
18 was with reference to your principal inspector for Robinson
19 and Brunswick. You said "My principal inspector doesn't think
20 they ought to have a license unless it's conditioned on such-
21 and-such, but I don't agree with that."

22 A No, that did not cross my mind.
23
24
25

3A/wel
wel 1

1 CHAIRMAN SMITH: If it had crossed your mind, would
2 you have included it in your answer?

3 WITNESS DANCE: I don't know, sir.

4 CHAIRMAN SMITH: The fact is, at that time you did
5 not include it?

6 WITNESS DANCE: Right.

7 BY MR. ERWIN:

8 Q Mr. Dance, this may be an inappropriate question
9 to address to you, but I'll ask you further:

10 Are you aware of any differences -- any legal
11 differences -- that say a shift in burden of proof that
12 occurs when an applicant becomes a licensee, when they acquire
13 a construction permit, as opposed to when they're applying for
14 one? Does their legal status before the Commission -- do
15 you know whether the legal status before the Commission changes
16 in any way?

17 MR. REIS: I'm going to object to the question.
18 That calls for a conclusion of law of the witness, and the
19 witness is not a lawyer.

20 CHAIRMAN SMITH: That would be true, but I think
21 that it may be necessary in the performance of his duties to
22 make that conclusion, and if that's the case, he can answer it,
23 but only if that's the case.

24 MR. ERWIN: I'm not asking him if he doesn't know.

25 CHAIRMAN SMITH: Do you understand the circumstances

we1 2

1 under which you may answer the question?

2 WITNESS DANCE: No, I don't.

3 CHAIRMAN SMITH: Well, you can't give an opinion
4 as an attorney, because you're not qualified. However, if
5 you were required in the performance of your duties in IE to
6 apply different standards, as he has described in his question,
7 you may answer.

8 WITNESS DANCE: Legally, there is a point in time
9 when we might be able to cite non-compliance, and when you
10 can't cite non-compliance. But in this case I don't think so,
11 I would treat it all the same.

12 The legality is not my issue. My answer is the
13 same, and I would expect the same truthful statement from
14 myself or the licensee at a preconstruction hearing or after
15 the construction permit has been granted.

16 BY MR. ERWIN:

17 Q Does anyone on the panel have an opinion that you
18 could express, in light of the Chairman's conditioning on it?

19 A (Witness Murphy) Could I make one observation, sir?

20 If I read the question:

21 "There is no evidence you have of needs or lack of
22 technical ability or management capabilities of running
23 this plant?"

24 I would personally read that as:

25 "Do you know of any problems?" rather than knowing

wel 3

1 of someone else's conclusions based on those problems. If
2 these problems had been identified to the Board, the Board
3 could draw their own conclusions on the problems.

4 CHAIRMAN SMITH: As a short cut, I don't know the
5 answer to your question either, but maybe Mr. Reis does, and
6 maybe you can just supply him with the answer about the shift-
7 ing of the burden and the standards for inspection. Would
8 that be satisfactory to you, Mr. Erwin? I don't think --

9 MR. ERWIN: I know the answer to the question.

10 CHAIRMAN SMITH: Well, give me the answer.

11 MR. ERWIN: But I didn't expect that to me -- I
12 mean, it's not because I don't know the answer to my question.

13 CHAIRMAN SMITH: Well, give me the answer to your
14 question.

15 MR. ERWIN: Well, it's my understanding -- and tell
16 me if I'm incorrect -- that . . . I believe I know the
17 answer to the question, because --

18 (Laughter.)

19 -- because we've been through this before with Carolina Power
20 and Light Company in the case of the Brunswick Nuclear Power
21 Plant, which the Conservation Council of North Carolina to
22 the NRC to put a condition upon their operating license of
23 Brunswick-2. -- I believe that would be the case -- in 1975, I
24 believe is the year. It's been sometime back.

25 And I believe the answer to the question is that

wel 4

1 there is a significant change in the legal status before the
2 Commission of a licensee once they obtain a construction permit
3 or an operating license, in regard to a number of matters.

4 In other words --

5 CHAIRMAN SMITH: I thought your question was
6 founded upon burden of proof.

7 MR. ERWIN: Well, I asked -- it was my understanding
8 at the time that the burden of proof, the burden of going
9 forward with the evidence, so to speak, in this proceeding
10 that we initiated before the NRC, which was successful from
11 our point of view in that the condition was placed upon -- a
12 condition was put upon the licensee, and the Conservation
13 Council's position was vindicated in that matter -- that the
14 burden of going forward with the evidence shifted upon the
15 granting of the operating license.

16 Now, Mr. Reis may be . . . but, in any event, the
17 point I was trying to get was that I thought it was manifest
18 that once a construction permit or operating license is
19 granted, the status of the Applicant, permittee, licensee,
20 changes significantly. And that's the only point I'm trying
21 to make.

22 WITNESS MURPHY: Mr. Chairman, we actually have
23 an opposite view on this in our regulations. We cannot issue
24 a notice of violation until a license or permit or the
25 equivalent has been issued. And at that point in time the

wel 5

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25

burden would be, as I understand it, upon the licensee to
refute that notice of violation.

Madelon

Fls

● Madelon 1
LWS WEL
c10 mpbl 2

Q Now I wasn't --

3 A (Witness Murphy) And that is the context in
4 which we look at a license.

5 Q And I wouldn't accept that as -- that's, exactly
6 the information I was seeking from the Inspections Branch.
7 This is -- the reference I made was to the imposing of
8 extraordinary conditions upon a license once it has been
9 granted. All right.

10 Now the point that I was trying to get at,
11 Mr. Dance, was if you had had any reason -- you or Mr. Long
12 -- if you'd had any reason to believe that the problems that
13 had been experienced by your branch that had been expressed
14 by Mr. Cantrell were not being resolved after the grant of
15 the construction permit, to your knowledge would it have
16 been more difficult or less difficult for you to impose
17 such a condition upon the license once -- upon the
18 construction permit once it was granted or before, to seek
19 to impose it, if you don't have the authority to impose it?

20 A (Witness Dance) I don't see any problem impos-
21 ing a condition or recommending the proposal of a condition
22 on a license after it's been issued. Now in this case we're
23 talking about a construction permit, and then a condition
24 to be applied to an operating -- somewhere at the end of the
25 construction phase.

mpb2

1 Q And it is your opinion that the burden of going
2 forward with the evidence regarding such condition would not
3 have changed upon the granting of the construction permit
4 without the addition?

5 MR. REIS: Again I want to object in that these
6 are legal matters, and I don't see where this is within the
7 scope of the duties of someone in Mr. Dance's position, a
8 supervisory inspector, in deciding what the burden of proof
9 is, the various burdens of proof and how they differ between
10 conditioning a license or imposing a condition after a
11 license is issued.

12 CHAIRMAN SMITH: I think he's already answered it,
13 that it simply does not affect the performance of his office.

14 It was my impression that you've exhausted the
15 area.

16 MR. ERWIN: You see, I was asking two completely
17 different questions. One was in regard to his duties --

18 CHAIRMAN SMITH: All right, fine.

19 MR. ERWIN: -- which relate to his office of
20 inspection, to inspecting a plant, and one related to
21 opposing.

22 You see, the testimony is that an inspector -- not
23 someone reviewing an application who would normally be review-
24 ing an application, but an inspector, an operating inspector
25 recommended on the basis of experience in other plants by

mpb3

1 the licensee that a condition be imposed upon this particular
2 licensee for the construction and operation of this plant.

3 And my questioning was directed toward whether Mr. Dance
4 was aware of whether it would be more difficult for this view
5 to be put forward and to be accepted by a board such as your-
6 self subsequent to the granting of the construction permit
7 than it would be to put it forward prior to the granting of
8 it.

9 And I think it's a very important distinction.
10 I accept completely Mr. Murphy's statement that they don't
11 have -- so far as I know, they don't have any authority to,
12 as he says, to cite non-compliance prior to the granting of
13 the construction permit.

14 CHAIRMAN SMITH: Well, do you have a question
15 before you now that you are prepared to answer?

16 WITNESS DANCE: Yes.

17 I suppose it would be more difficult to enter
18 a condition after a license has been issued than before it's
19 issued.

20 That was your question?

21 BY MR. ERWIN:

22 Q Exactly. Thank you very much. It was a good
23 answer.

24 To that fact -- were you aware of that fact at
25 the time you answered this question, or did you believe that

mpb4

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

to be true at the time that you answered this question?

A (Witness Dance) I did not consider that fact, but I believed it to be true. I think I would have believed it.

Q And you did not consider that aspect of it at the time you answered this question?

A Right.

Q Do you now believe that you should have considered it?

A No, I don't think I should have considered that aspect.

Q Do you believe that --

MR. ERWIN: I don't believe I have any more questions for the witnesses.

Thank you.

CHAIRMAN SMITH: Do you have questions?

MR. O'NEILL: Just about 30 seconds' worth.

BY MR. O'NEILL:

Q Mr. Long, in an earlier colloquy with Mr. Bright I believe you established that I&E does have more of a responsibility than simply walking into a plant with a check-off list, that there is some interpretation and some value judgments being made, is that correct?

A (Witness Long) Of what one sees, yes.

Q And in response to a question by Mr. Reis a few

mpb5

1 minutes ago you stated that when you inspect the plant you
2 look for both compliance, with requirements, and areas where
3 requirements perhaps should exist.

4 A Right.

5 Q Do I have that correct in my notes also?

6 A Yes.

7 Q Are there areas during an inspection where an
8 inspector might raise a concern, he doesn't find there's
9 a non-compliance, but he does suggest he is concerned with
10 the licensee's performance in one area or another?

11 A Yes. There are several different terms that we've
12 used. One that is more commonly used, and it will appear in
13 the inspection report, is an unresolved item.

14 Q And while Mr. Murphy indicated that I&E is not
15 in the business of consultants or offering advice, they
16 often will note where other licensees have resolved these
17 similar areas of concern by perhaps following this reg guide
18 or perhaps making some sort of a fix or adopting a procedure
19 one way or another?

20 A Yes, we have no problem with inspectors identify-
21 ing or calling the licensee's attention to other satisfactory
22 resolutions of similar or very similar problems because, well,
23 generally they would be documented and available to the
24 licensee.

25 Q So these unresolved items are sometimes carried

mpb6 1 as I believe the term "open items" from inspection to inspec-
2 tion until that concern is resolved by the inspector?

3 A Yes. An unresolved item is one that possibly
4 might involve an item of non-compliance. But at that stage
5 there is no non-compliance matter. They will be carried
6 until they are finally resolved and worked out in the next
7 report.

8 Q And if the licensee then adopts one of these
9 helpful suggestions and the inspector comes back and finds
10 that the area of concern no longer exists, then that open
11 unresolved item will be closed. Is that sort of the normal
12 practice?

13 A I'm saying if the resolution adopted was a
14 satisfactory solution, the item would be closed.

15 Q Thank you, sir.

16 MR. O'NEILL: No further questions.

17 FURTHER EXAMINATION BY THE BOARD

18 BY MR. BRIGHT:

19 Q Mr. Dance, I have a problem. When we were talk-
20 ing about your state of mind under Dr. Leeds's questions,
21 I was not quite sure how you answered the particular ques-
22 tion on the two different times you were asked it. So let
23 me just ask the question again, and this will be the defini-
24 tive answer, I hope, probably not the definitive question,
25 but the definitive answer.

mpb7

1 When you were being questioned by Dr. Leeds and
2 were asked by him whether there was any additional evidence,
3 and words to that effect, did you or did you not think of
4 your principal inspector's report that requested or suggested,
5 recommended a condition in the license?

6 I thought at one time you said Yes, it crossed
7 my mind. The next time when the Chairman asked you if it
8 had crossed your mind, would you have done something, and
9 you said Yes, or whatever -- I just want to clear that up.

10 A (Witness Dance) The question, did I have any
11 other evidence of needs or lack of technical ability or
12 management ability, it crossed my mind regarding Mr.
13 Cantrell's memo. I don't recall that it specifically
14 concerned or crossed my mind pertaining to the condition-
15 ing of the license. It crossed my mind that he did have a
16 concern regarding the capability of the management, but I
17 didn't have any other concerns pertaining to that because of
18 the corrective actions that I had seen taken place -- taking
19 place.

20 Q Well, at the time you answered the question, then,
21 would it be fair to say that you considered that your testi-
22 mony, as submitted, was an accurate representation of the
23 situation, that is there really was no further significant
24 evidence concerning the ability of the applicant?

25 A Well, at the time I thought yes. But if I

mpb8

1 reflected on it now, which we have, I think it would have
2 been appropriate to include that statement.

3 Q Thank you.

4 CHAIRMAN SMITH: I heard you say yes, but I
5 think no.

6 Would you read back his last answer?

7 (Whereupon, the Reporter read from the
8 record as requested.)

9 CHAIRMAN SMITH: Your answer was directed to
10 the principle of the question and not the part that follows
11 that is.

12 WITNESS DANCE: That's right.

13 CHAIRMAN SMITH: Okay. I'm sorry about that,
14 I just thought I should be hearing no.

15 Is there anything further with these witnesses,
16 with this panel?

17 MR. REIS: No.

18 CHAIRMAN SMITH: Okay.

19 As a panel, gentlemen, you are excused.

20 (The panel excused.)

21 CHAIRMAN SMITH: We'll take a break.

22 But before we take a break, there are two
23 outstanding matters that I want to bring up:

24 One is a Memorandum and Order we asked for
25 Mr. Wessmen up here, and if you have some notes or memoranda

mpb9

1 pertaining to his meeting that they bring up, and if he did
2 bring some, could you bring --

3 MR. REIS: The only notes and memoranda he has
4 have been reproduced as the inspection report. I asked him
5 to search his files as to whether he had any further notes
6 and memoranda and I believe the answer is that he has no
7 further notes or memoranda.

8 Well, we has told me that he has no further
9 notes or memoranda.

10 CHAIRMAN SMITH: Okay.

11 My only point was if there is going to be any-
12 thing we would like to have it as soon as possible.

13 Similarly we ask that the Applicant produce a
14 witness and/or documents which could explain certain aspects
15 of your material, and if you have documents which explain it,
16 would you please make them available to us as soon as you
17 can.

18 MR. JONES: Mr. Chairman, we were going to do most
19 of that through Mr. Banks. We do have three policy state-
20 ments regarding the corporate policy on nuclear safety,
21 quality assurance, and health physics that I distributed
22 as a part of the orientation program. We can make those
23 available if you would like them ahead of time.

24 We were going to put them in as exhibits
25 through Mr. Banks.

mpb10

1 CHAIRMAN SMITH: Yes.

2 MR. JONES: They're rather short, mostly one
3 piece of paper each.

4 DR. LEEDS: These are the documents that are
5 referred to in the Applicant's Exhibit HH?

6 MR. JONES: Those are the portions of the
7 documents you requested, yes, sir, in the three copies.

8 DR. LEEDS: It says corporate positions. That's
9 the document?

10 MR. JONES: As it appears in the orientation
11 manual, yes, sir.

12 CHAIRMAN SMITH: All right.

13 And let's make the blanket request of every
14 party that anything you propose to submit in writing you
15 make it available as soon as it is available to you so we
16 have maximum time of possession.

17 Okay. Let's take a ten minute break.

18 (Recess.)

WRB flws

19.

20

21

22

23

24

25



100

100



100

100



WR1com
fis Madelon
c ebl

1 CHAIRMAN SMITH: Gentleman, during the recess,
2 Mr. Reis, the Board has been discussing Board Exhibit 8, the
3 Board Notification document, and there is still a certain
4 amount of uncertainty about what we're supposed to do with
5 this report, and we're not sure we want anybody to tell us
6 what to do with it.

7 (Laughter.)

8 We do think that some further inquiry should be
9 made into it, and we're going to ask if the Office of Execu-
10 tive Legal Director would contact the authors of this report,
11 Messrs. Howard, Conger, Easterly and Schwink, advise them of
12 the issues of the rem and here, and inquire if any of them or
13 anyone working on this report has information which they
14 believe could be useful in developing a full record.

15 It is going to require a certain amount of legal
16 judgment on their part but I think that that can be handled
17 pretty easily, at least over and above what's in the report.
18 What's in here doesn't do much for us.

19 Mr. Erwin, on behalf of Mr. Eddelman, approached
20 the bench after lunch and pointed out that Mr. Eddelman was
21 called upon to make his limited appearance statement without
22 any notice, and in retrospect, Mr. Eddelman feels that he
23 didn't really cover all of his points and he wants about five
24 minutes more. And he observes that it would be better that
25 his completed remarks be made as early as possible in the

WRB/eb2 1 hearing so that the maximum opportunity to respond to them
2 will be provided. And we agree that that would be appro-
3 priate.

4 Are you ready now, Mr. Eddelman, or would you
5 rather --

6 MR. EDDELMAN: I'm ready now, Mr. Chairman.

7 CHAIRMAN SMITH: Okay.

8 MR. TROWBRIDGE: I assume the groundrules are still
9 the same, Mr. Chairman, that we're talking about an additional
10 statement within the issues as defined by the Board, namely
11 whether the operating experience of CP&L with other plants
12 that bears on the technical qualifications --

13 CHAIRMAN SMITH: The question was framed in that
14 context.

15 MR. EDDELMAN: That's correct. These all bear on
16 that. If I can just go ahead, if you don't like something
17 I say, object.

18 FURTHER LIMITED APPEARANCE STATEMENT OF

19 WELLS EDDELMAN

20 MR. EDDELMAN: One thing that I picked up at the
21 NRC in Washington was where they had a maintenance supervisor
22 who didn't know how to inspect welds by the dye penetrant
23 method or the radiological method and so on. And I took the
24 North Carolina Community College welding course and they give
25 us some stuff to read about that. Of course we don't do any



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100



101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200



RB/eb3

1 of it.

2 Well, CP&L proposed to the NRC, and apparently
3 this was accepted, that they, within 90 days, would have
4 this person complete a reading course in this stuff also,
5 without actually having any experience at all, and this person
6 is supposed to supervise maintenance of a nuclear plant.

7 Now I wouldn't qualify myself on the basis of what
8 I've read even though I got an A in the course, to inspect
9 probably a weld on somebody's backyard barbeque, and I really
10 question whether a person can validly inspect a nuclear
11 plant on the basis of a reading course in these methods. It
12 is very exacting work.

13 I also would like to raise the question, in the
14 Safety Analysis for the Shearon Harris Plant -- I believe
15 that's Volume 4 to their Preliminary Safety Analysis Report.
16 They make a great many promises and they promise that they
17 will comply with this and comply with that. In fact, you can
18 look through that Preliminary Safety Analysis Report and
19 you'll see there's a promise here and a promise there. They
20 say they will comply with the regulations in many cases, and
21 they just said, Well, CP&L will comply.

22 It does not say how they propose to comply. It
23 does not give any timetable. It does not explain what re-
24 search or methods they intend to use to validate this.

25 And there is I believe an Atomic Safety and

R/eb4

1 Licensing Appeal Board decision -- I can't cite it, but I
2 believe it happened in August of '77, where they ruled that
3 an applicant should not only make the promise that they are
4 going to resolve these safety issues but actually submit a
5 program which gave a reasonable method which the Board could
6 accept as being able, within the time frame of the construc-
7 tion, to resolve all these safety issues so that when you get
8 to the operating license stage you wouldn't have a whole
9 bunch of unresolvable things or things that were already
10 built and then they come in and say, "Well, it would cost us
11 too much to fix it now."

12 I think this is an important issue.

13 I have two other points. One is-- Let's see:

14 This thing I have here is a copy of Honnicker
15 versus Hendrie which I imagine that the Board knows about.
16 This was the attempt by Jennie Honnicker to have the NRC shut
17 down the nuclear industry. There is one table in here on page
18 60 that I would like to allude to because it refers to
19 primary-to-secondary-system leakage experience in pressurized
20 water reactors.

21 For the public members of the audience what this
22 means is that radioactive materials, probably mostly radio-
23 active water, is leaking out from their first containment
24 into their second containment, and it could conceivably get
25 to the outside.

WRB/eb5

1 H. B. Robinson is listed as the first one in this
2 table and it has the second-largest average leakage rate,
3 55 gallons per day for seven months, and it has by far the
4 largest individual leakage rate, 14,400 gallons in less
5 than one day. I believe that was one single incident.

6 The source is stated to be operating reports from
7 these respective plants and I believe the Staff could probably
8 find that. This again seems to be the worst incident in the
9 nation as reported in this table. It doesn't give evidence
10 of a great commitment to safety on CP&L's part.

11 Another thing I would like to do is to just
12 reference a few of these tables in this Board Notification.
13 Now I don't want to get into discussing, you know, what the
14 validity of this thing is. My experience with statistics
15 is that the central-limit theorem usually applies, if you
16 take enough variables from any random garbage distribution
17 you end up with a normal curve, so by taking these things
18 to be normal curves you may get something useful as far as
19 the spectrum of the plants is concerned without being valid
20 at all for any individual plant.

21 But what they say about Robinson, let's see.

22 In these other items, planning, radiation pro-
23 tection and control, quality assurance and safeguards, all
24 these combined, -- this Table 4, which I think is on page 14
25 at Tab 3, H. B. Robinson seems to be the worst plant in Region

B/eb6

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

II in these respects.

On page 21, Table 10, Robinson personnel has one of the worst records in the nation.

Page 25, Brunswick is the worst in Region II in I think it is non-compliances. Brunswick 2-- "No, Brunswick as a whole-- Let's see, which page? Table 6, page 17, the second worst in the nation, the worst in Region II in non-compliances with 606.5 inspector hours in fiscal year '76.

I added up all the inspector hours for all the plants and divided by the number of plants and I get an average of about 510 inspector hours per plant, and there is a correction on inspector hours that's attached to this. And over 100 hours it would be about .1 per hour correction I believe, according to the table.

Also, Table 8, page 19, the same tab, Brunswick worst in Region II in deficiencies.

That's all I have at this point.

WRB/eb1 1

Whereupon,

CHARLES E. MURPHY

and

VIRGIL L. BROWNLEE

resumed and stand and, having been previously duly sworn, were examined and testified further as follows; and

CHARLES MC FARLAND,

ALLAN HERDT,

and

JACK BRYANT

were called as witnesses and, having been first duly sworn, were examined and testified as follows:

DIRECT EXAMINATION

BY MR. REIS:

Q Mr. McFarland, Mr. Hardt, and Mr. Bryant, in that order, will you please identify yourselves?

A (Witness McFarland) I'm Charles McFarland, principal inspector, in the Project Section of Reactor Construction and Engineering Support Section of Region II of the NRC, Atlanta.

A (Witness Hardt) I am Allan Hardt. I'm the chief of the Project Section of the Reactor Construction and Engineering Support Branch, NRC Region II, Atlanta.

A (Witness Bryant) I'm Jack Bryant, chief, Engineering Support Section Number 1, Reactor Construction and

25



100



100

100



JRB/eb2

1 Engineering Support Branch, Region II, Atlanta.

2 Q Gentleman, are you each familiar with the testi-
3 mony that has been marked and distributed as Panel 2,
4 Murphy, Bryant, Herdt, Brownlee and McFarland?

5 A (Chorus of "Yes.")

6 Q Do any of you have any additions or corrections to
7 make to this testimony?

8 A (Witness Murphy) I do not.

9 A (Witness Brownlee) No.

10 A (Witness McFarland) No.

11 A (Witness Herdt) No.

12 A (Witness Bryant) No.

13 Q If the questions set out in this testimony were
14 propounded to you, would you give the same answers as set out
15 in this document formally filed?

16 A (Chorus of "Yes.")

17 Q Do each of you support the testimony as individuals
18 as well as the office position except where such testimony
19 may be directed to an individual member of the panel?

20 A (Chorus of Yes.)

21 MR. REIS: Mr. Chairman, I previously distributed
22 at the Board's request at the beginning of the hearing the
23 responses Mr. Murphy received to his memorandum of October 3,
24 1978, on inspection findings at Shearon Harris Nuclear Plant
25 and other CP&L facilities. I distributed this to the parties.



10
11
12



13
14



1 I would now like to introduce it as Staff Exhibit
2 I believe 17 is out next number.

3 (Whereupon, the document
4 referred to was marked
5 as Staff Exhibit 17 for
6 identification.)

7 CHAIRMAN SMITH: There being no objection, it is
8 received as Staff Exhibit 17.

9 (Whereupon, Staff 17,
10 having been previously
11 marked for identification,
12 was received in evidence.)

13 MR. ERWIN: Mr. Chairman, excuse me. This is
14 which document again?

15 MR. REIS: It's a document dated October 3, 1978,
16 and it's a memo from Mr. Murphy for the Reactor Construction
17 and Engineering Support Branch staff.

18 CHAIRMAN SMITH: These responses are referred to
19 in the direct written testimony. The Board to make the record
20 complete asked that the actual responses be produced.

21 MR. ERWIN: We were just trying to find it.

22 Mr. Reis, do you by any chance have an extra copy?

23 MR. REIS: No, I do not have an extra copy. The
24 only copy I have left is my own.

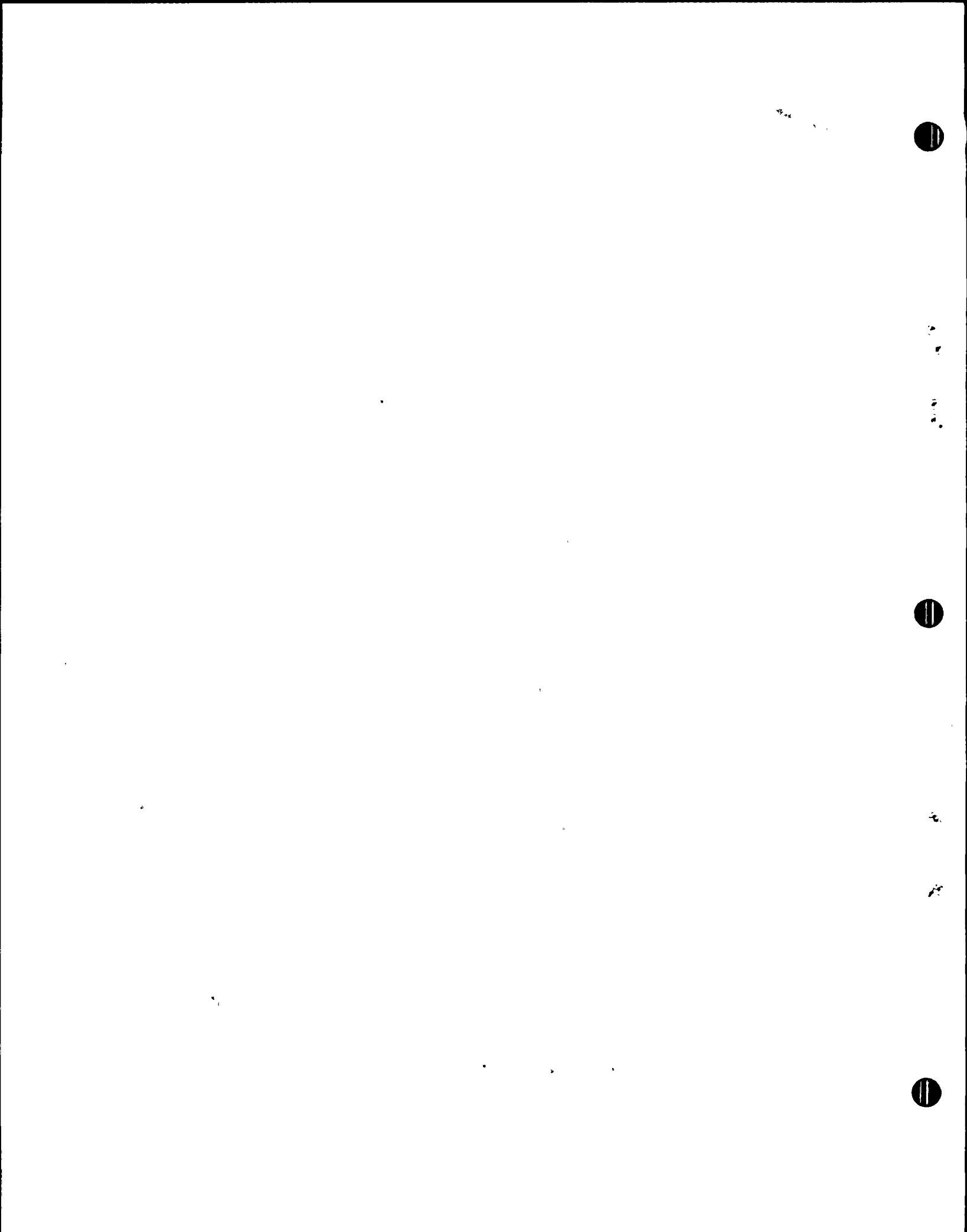
25 That's all I have at this time.

MRBeb4 1 CHAIRMAN SMITH: Mr. Erwin, I know you are sud-
2 denly called upon to do your cross-examination and I might
3 make a comment that might be of help to you.

4 In this written testimony, the page number escapes
5 me but Mr. Murphy states that responses were received from
6 his memorandum and there were no negative responses. The
7 Board felt that it might be better to have the responses...
8 available for cross-examination. They have been made avail-
9 able for examination and I am satisfied that they support
10 Mr. Muzphy's response.

11 MR. ERWIN: We have seen the document and I'm
12 quite familiar with it. I read it. It's not that I'm not
13 aware of it. I just didn't happen to-- I didn't catch it
14 when Mr. Reis was presenting it. I didn't have it right in
15 front of me.

2c 16 (Testimony of Panel 2 follows)
17
18
19
20
21
22
23
24
25



Panel II - Murphy, Bryant, Herdt, Brownlee, McFarland

Q. Mr. Murphy have you previously testified in this proceeding?

A. Yes.

Q. Mr. Brownlee, have you previously testified in this proceeding?

A. Yes.

---- Q. Mr. Bryant, can you give us your position, your contact with CP&L facilities in the course of your work, and what that contact was or is?

A. Presently, I am Chief of Engineering Support Section No. 1, Reactor Construction and Engineering Support Branch. Initially as a reactor inspector I was the assigned principal inspector at H. B. Robinson from July, 1968, until April, 1971. I participated in about 36 inspections at the Robinson site and five vendor inspections of Robinson equipment.

In October 1972 I became senior inspector in charge of the Engineering Support Section of the Reactor Construction Branch in which I supervised civil, electrical, mechanical and metallurgical engineers. While I was in this capacity, my inspectors conducted inspections of the Brunswick site. I accompanied them on one inspection in 1973 and one in 1974, and was cognizant of their findings on all inspections.



1
2
3
4



5
6
7



In May 1974, I became Chief of the Projects Section of the Construction Branch and supervised the construction principal inspectors of Brunswick and Harris. I remained in this position until October 1977 and was cognizant of all construction inspections at Brunswick and Harris. In this capacity I participated in three investigations of the Brunswick site and accompanied inspectors on two inspections. In November 1975 and May 1977, I accompanied inspectors to the Harris site.

In October 1977, I became Chief of Engineering Support Section No. 1, which includes geological and civil engineers who have made inspections at Harris. I have been cognizant of their findings.

In addition to inspections, I have participated in or attended about a dozen meetings with CP&L.

Q. Mr. Herdt, can you give us your position, your contact with CP&L in the course of your work and what that contact was or is?

A. Presently, I am Chief, Project Section, Reactor Construction and Engineering Support Branch. Initially, as a metallurgical engineer, in the Engineering Support Section of the Reactor Construction and Engineering Support Branch, I performed 9 construction inspections at Brunswick Nuclear Site from

March 1973 to October 1975. These inspections primarily involved the areas of welding and nondestructive examinations. I performed 2 inspections at H. B. Robinson from April 1975 to November 1975 primarily in the area of inservice inspections.

In my present position as Chief, Projects Section, I performed an accompanying inspection at Shearon Harris Nuclear Site in June 1978. In addition, I assisted Engineering Support Section No. 2 in an operating inspection at Brunswick in September 1978.

Q. Mr. McFarland, can you give us your position, your contact with CP&L in the course of your work and what that contact was or is?

A. Presently, I am Principal Inspector in the Projects Section, Reactor Construction and Engineering Support Branch, Region II, Atlanta, Georgia. I was assigned as the Principal Inspector, Brunswick Nuclear site from October 1972 until completion of the project which was December 1974 for Brunswick Unit 2 and June 1976 for Brunswick Unit 1. In addition, I was assigned as the Principal Inspector, Shearon Harris Nuclear site from December 1972 to February 1977.

I performed 26 inspections of the Brunswick project activities and 13 inspections of the Harris project activities during the time periods noted above. Eight of these inspections included a review of Harris work at the corporate (Raleigh, N.C.) offices. These numbers include

inspections of CP&L on their audits of CP&L work at General Electric, Westinghouse, and United Engineers, Chicago Bridge & Iron and Combustion Engineering.

CP&L has consistently accepted the role of the IE Principal Inspector and the IE program. CP&L kept me informed of management concerns and made engineering and QA documents readily available to me and the other construction inspectors.

Q. Gentlemen, for how long has NRC been inspecting CP&L facilities under construction?

A. Ten years.

Q. Has CP&L established a Quality Assurance program, or management control system, to control the quality of the nuclear generating facilities it constructs?

A. Yes.

Q. Have you looked at CP&L's program, and if so--what have you found?

A. Our inspections, as our testimony will show, have not revealed examples of repetitive or systematic problems. Systematic or repetitive failures would be indicative that the management control system was not functioning properly and would be cause for escalated actions on the part of IE. Although

we have discovered individual failures to perform as identified by the licensee or by the NRC, though indicating a need for corrective actions, they do not indicate failures in management.

Q. What do you conclude?

A. We conclude that CP&L management has been effective in controlling the quality of construction at their facilities. The Quality Assurance Program in effect at Harris meets requirements that are significantly more stringent than were in effect during the construction of Brunswick and Robinson and our inspections to date indicate that this program has been satisfactorily supplemented. We, therefore, conclude that CP&L management is capable of constructing the Shearon Harris facility in full compliance with NRC requirements.

Q. What do you think of CP&L's present overall corporate management ability or capability to run a quality assurance/quality control (QA/QC) program in the construction of nuclear facilities?

A. Based on our review of the findings by Region II of I&E construction inspections of the licensee's QA/QC programs and the implementation of those programs; the licensee's response to enforcement matters; the licensee's response to reportable construction deficiencies; and discussions with Region II I&E construction management and inspector personnel, we conclude that the licensee's management capabilities have been adequate to implement the QA/QC programs and management control systems to give reasonable assurance

of quality during construction; therefore, there is no basis for us to believe that CP&L will not provide adequate management capability during future construction phase activities at Shearon Harris.

Q. Can you give us the specific factors both positive and negative, on which you have based the prior answer on CP&L's managerial ability?

A. CP&L has consistently accepted the role of the NRC inspection and enforcement program, has kept the principal inspectors informed of management concerns and has made engineering and QA documents readily available to the construction inspectors.

Region II of I&E has reviewed CP&L's current overall construction QA/QC program and procedures, the corporate audits and the engineering and construction QA surveillance reports of activities by CP&L engineering, the nuclear steam system suppliers, the architect engineers and the CP&L contractors for services and hardware. Routinely the inspectors have observed work related to the above construction activities and records (including nonconformance reports and deficiency and disposition reports), periodic management reports by both CP&L and their constructors. Region II of I&E conclusions are that CP&L has maintained an adequate managerial ability during construction phase activities.

Q. What are the objectives of NRC construction inspection program?

A. As we previously stated, the objective of the NRC programmatic construction inspection program is to determine, through inspections utilizing sampling techniques, that the nuclear facility is being constructed in accordance with applicable regulations and commitments made by the applicant. A major segment of this program is to determine, in conjunction with NRR, that the QA/QC program as implemented is effective and provides assurance that the safety and welfare of the public are protected. This objective is achieved by examination of management controls, including quality assurance and quality control manuals, work procedures, records and documents and by the observation of work in progress. Work in progress is inspected for quality workmanship, conformance to control procedures and conformance to codes. Records are examined to verify that purchased materials and equipment met quality standards and that quality control inspections are performed throughout construction.

Q. What is inspected?

A. Inspections are conducted in accordance with the NRC construction inspection program, which includes selective examinations of procedures and representative records, interviews with craftsmen and site personnel and in-depth observations by the inspectors within their specific construction disciplines. Their inspections consist of observations of work

in progress and noting where work is interrupted for identified inspection hold points as directed by engineering instructions.

Q. Can you tell us generally how this is carried out?

A. NRC inspection of the licensee's and contractor's construction QA program is initiated soon after tendering of the application. Inspections include audits of the licensee's major contractor's and vendor's QA programs. This is done with the assistance of NRC's - Licensee Contractor Vendor Inspector Program Branch personnel. On occasion, the NRC inspectors meet with licensee management in their corporate offices or at the construction site and review the contractor activities foreign and domestic vendor quality assurance program. Manufacturing facilities are inspected in detail by independent NRC inspections plus the licensee's vendor inspector program. This program continues until required inspection activities have been completed at, or a short time before, the operating license is issued.

The RC&ES Branch is organized with 32 persons - 18 engineering specialists, 10 principal inspectors, and 3 section chiefs, and the branch chief. These are experienced and trained inspectors. The inspection program currently



consists of 96 inspection procedures related to the engineering disciplines (17 civil, 29 mechanical, 20 electrical and instrumentation, and 29 welding, NDE and inservice inspection) plus 27 procedures that are related to management, QA, and interdisciplinary subjects. A similar set of line items of inspection were in effect for the inspections of Brunswick and Harris. These line items inspect literally thousands of details that are representative of the construction work on the project for the licensee and the inspection program provides for at least a half-day of independent inspection for each inspection by each inspector. The inspectors for the engineering disciplines inspect work on all of the currently active projects (15) with 33 reactors. The principal inspectors each work on 1 to 3 projects (2 to 7 reactors per inspector) and have frequent opportunities to inspect other projects. There is a lot of "crossfertilization" of construction knowledge within the branch. These inspectors know of the management procedures, practices and philosophies of nearly all of the major AEs and constructors in the U.S. This knowledge and background is used in each inspection.

Q. In regard to construction at Shearon Harris, what is the Quality Assurance/Quality Control program?

A. Through contractual arrangement, Ebasco is to provide the Architect-Engineering (A-E) services and Daniel Construction Company is providing the

construction supervision for the Harris Project. Carolina Power & Light Company (CP&L) is managing site construction and QA/QC surveillance survey functions. CP&L site QA Unit and Engineering Units perform acceptance inspection functions. CP&L's manager of engineering and construction QA (Raleigh Offices) performs site QA surveillance functions. CP&L corporate QA audit section performs site audits. Daniel Construction Company provides labor and direct labor supervision. Permanent facilities are constructed in accordance with the A-E's engineering documents.

Q. How does this compare with what was done at Robinson and at Brunswick?

A. CP&L is assuming complete management of the construction and QA/QC activities at the Shearon Harris site which was not done at the Robinson and Brunswick facilities. Robinson 2 was a Westinghouse "Turnkey" project with CP&L's participation in the construction of the facility at a minimum until mid-1968, where upon, CP&L's involvement increased and management exerted increasing control throughout the remainder of construction. At Brunswick, Brown and Root, the constructor, performed site QA/QC functions with CP&L having an audit function. This audit function was performed both by CP&L's site QA surveillance group as well as audits from their QA corporate offices. CP&L management was responsive to problem areas as was borne out of CP&L's increasing its site QA inspection and engineering staffs to provide increased surveillance over contractor activities at the Brunswick project.

CP&L site receiving and warehouse inspectors at Harris are responsible for storage and in-storage inspections in accordance with documented procedures that establish the storage and inspection levels for each type of equipment or material. Inspection of all construction activities are performed by the CP&L site engineering and QC inspectors who are trained and qualified in specific construction disciplines.

There is a summary of the construction inspections with the inspection dates, inspectors, scope of inspection, item of noncompliance (if any) for Robinson, Brunswick and Harris tabulated in Appendices D, E and F to panel I.

Q. What is CP&L's QA/QC program on a corporate level to assure the proper construction at Shearon Harris?

A. The manager, Corporate QA Audit Group, who reports to the vice president of System Planning and Coordinating Department, who in turn reports to the Executive Vice President and Chief Operating Officer, is responsible for auditing of all QA program activities within CP&L (Engineering, Construction, QA) and external activities of the Architect-Engineer, Nuclear Steam System Supplier and the vendors. Upper level management reviews these reports and has obtained timely actions where required.

Q. Gentlemen, can you define the phrase "management control systems"?

A. An overall term that is used to address the multiple measures that are used to assure top management's enforcement of management requirements. These measures include planning; estimating; budgeting; programming, scheduling; check and balance systems; scheduled meetings and reports; etc. This term as we use it usually refers to the QA Program. QA programs and their implementation provide an excellent management control systems. The purpose of a management control system is to get what you ordered.

Q. What is CP&L's management control systems as to the construction of Shearon Harris?

A. The NRC IE inspection program reviews only the QA/QC program aspects of the overall CP&L management control systems. The CP&L QA program is described in Section 1.8 of the PSAR and indicates how the CP&L project QA program meets the requirements of Appendix B to 10 CFR 50. The program incorporates appropriate industry codes and standards. The CP&L QA program incorporates the program for plant design, equipment procurement, fabrication, erection and plant construction activities by CP&L, Ebasco, Westinghouse and Daniel.

Q. Can it work and assure quality?



2
B
* 2



2
2



A. CP&L's QA program meets NRC requirements and that CP&L program together with the NRC inspections and enforcement program will assure that CP&L will meet their commitments to provide adequate management capability during construction phase activities.

Q. Has CP&L management control systems been improving since it constructed Robinson?

A. Yes, CP&L's management involvement with control of construction activities was minimal during the construction of Robinson. They became more involved during the Brunswick construction phase and are now more involved than many other utilities in managing construction and QA/QC activities.

Q. What are the factors that influence your answer?

A. A positive factor is that CP&L has accepted the role of managing the overall and the details of the construction and QA/QC programs. CP&L has hired qualified and experienced management personnel. CP&L has been consistently responsive to the findings of Region II of I&E's inspections and to the enforcement actions.

It is to be noted that the CP&L corporation has not managed a previous nuclear project to the level of detail to which they will manage for the Harris project. However, personnel employed by CP&L, such as the senior vice-president for construction and engineering, has been responsible for construction at other nuclear projects.

Q. How has CP&L utilized its past management experience, both good and bad in construction of nuclear facilities?

A. CP&L has maintained a common core of upper level management through the Robinson, Brunswick and Harris projects. CP&L has hired qualified and experienced personnel to manage construction and QA/QC activities, developed a documented QA program for control of QA activities, and is managing the construction and QA/QC activities at the Shearon Harris site.

Q. What has it learned from experience at Robinson and Brunswick, and how has it used such lessons?

A. CP&L has learned that they need to control more of the craft and QA/QC work to control the overall project quality, costs and timeliness.

Q. Does CP&L show any lack of technical qualification or ability to construct Shearon Harris?

A. No, moreover CP&L has supplemented their capabilities with the capabilities of their consultants, architect engineer (A-E), nuclear steam system supplier (NSSS) and construction supervisor.

Q. What sources and what negative and positive factors did you consider in formulating that answer?

A. Our past experience in examining and inspecting the implementation of other utility QA programs for construction and discussions with responsible construction personnel in Region II of I&E. CP&L's architect engineer, nuclear steam system supplier, construction supervisor have all had previous experience on several nuclear plants. Additionally, CP&L has hired experienced personnel to manage site construction and engineering and construction QA activities. Engineering support, drawings, specifications and QA/QC programs and procedures have been developing for an extended period of time.

Q. Does CP&L show any lack of managerial ability or capability to construct Shearon Harris?

A. No, CP&L has demonstrated effective capability for meeting quality requirements for work already completed and that work in process at Shearon Harris. For problems outside the scope of expertise of CP&L, Ebasco, and Daniel, CP&L can hire consultants.

Q. What sources and what negative and positive factors did you consider in formulating that answer?

A. Our past experience in examining and inspecting the implementation of other utility QA programs for construction and discussions with responsible construction personnel in Region II of I&E. I&E inspections Region II to

date reflect that CP&L has demonstrated effective managerial capability for meeting managerial, technical and quality requirements for work already completed, and work in process at Shearon Harris.

Q. Do you have any facts indicating any present need for CP&L to improve its technical ability in order to construct Shearon Harris?

A. No; however, plant location and marginal field office facilities may make it difficult for CP&L to obtain and retain experienced, competent, technical people. This has not impacted construction schedules or compromised quality of work. We are not cognizant of CP&L's salary schedule nor recruiting program, but they are committed to an adequate program. CP&L has established an active recruitment unit.

Q. Do you have any facts indicating any present need for CP&L to improve its managerial capability in order to construct Shearon Harris?

A. No, the Region II of I&E construction inspection and enforcement history do not indicate a lack of CP&L managerial capability to construct the facilities.

Q. Do you have any facts indicating present need for CP&L to improve its QA/QC programs in the construction of Shearon Harris?

A. No. The specifications, QA Manuals and procedures are current with work being done and Region II of I&E inspection reports reflect that CP&L is implementing the overall QA/QC program commitments of the PSAR.

Q. Do you have facts indicating a need to improve the actual operation of the QA/QC programs in the construction of Shearon Harris?

A. No, the Region II of I&E construction inspection and enforcement history does not indicate a lack of control of the QA/QC programs for construction. CP&L is implementing the overall QA/QC program commitment of the PSAR.

Q. What is CP&L's attitude to QA/QC in the construction of Shearon Harris at the plant site and at the corporate level?

A. CP&L has fully committed themselves at both site and corporate level to provide effective QA/QC programs during the construction of Shearon Harris.

Q. Does, in your opinion, CP&L management demonstrate sufficient reliability and responsibility to run a QA/QC program?

A. Yes. CP&L has developed, implemented and manned a construction QA/QC program that encompasses corporate, engineering and design and construction activities which are commensurate with the status of project.

Q. What is the basis of your answer?

A. Region II of I&E has reviewed the CP&L QA program, QA manuals, procedures; held discussions with CP&L corporate, engineering and design, licensing and construction management, engineers, QA/QC and construction personnel.

Region II I&E inspection reports for construction are as noted in Appendices D, E and F to panel I.

Q. On the basis of latest inspection reports, does CP&L have enough QA/QC people at Shearon Harris and on the corporate level?

A. Yes; however, CP&L has had some problems in obtaining and retaining experienced, competent, technical QA/QC personnel. This has not impacted the construction schedules nor compromised the quality of work. The NRC inspection and enforcement program will assure that CP&L will meet their commitments to provide effective management capability during construction phase activities. CP&L, as we have stated, has established an active recruitment unit.

Q. What is the level of their training?

A. NDE personnel are qualified to industry standard such as the Society of Nondestructive Testing SNT-TC-1A. Other inspection, examination and test personnel are qualified to the SAR commitment, NRC Regulatory Guide 1.58 with



01 20 19 12



01 20 19 12



exceptions as stated in the SAR. The engineering personnel are trained relative to information in the SAR, applicable sections of the Code of Federal Regulations, the Regulatory Guides, the American Society of Mechanical Engineer Code requirements, and CP&L corporate engineering standards and procedures. The IE inspection program provides verification of the training of inspection personnel.

Q. What is their motivation?

A. The individuals have typically displayed a high level of professional motivation.

Q. Do you know of any other opinions in the Atlanta Office of NRC on the competence or reliability of CP&L to conduct a QA/QC program in the construction of Shearon Harris?

A. A written request was made to the members of the Reactor Construction and Engineering Support Branch soliciting their opinions and experience relating to any CP&L facilities or the corporate offices which would reflect adversely on the capability of CP&L management to construct or to operate Harris. We attach a copy of that request as attachment Appendix D. The Staff was assured that there was no attempt to obtain information either in support or in opposition to the licensing of this facility but rather to present complete and factual testimony to the Board.

All technical staff members of the Reactor Construction and Engineering Support Branch responded. There were no adverse comments.

Q. Does CP&L presently have a program to attempt to identify safety-related problems in construction before those problems arise?

A. Yes, that is an integral part of a QA program. CP&L conducts corporate level audits, engineering and construction QA surveys, site QA unit surveys, trend analysis of nonconformance reports, and QC inspection. Additionally, CP&L routinely performs an engineering review of matters described in the NRC Inspection and Enforcement Bulletins and Circulars, project design changes and construction work.

Q. Who has responsibility for identifying these matters in various phases of the construction of Shearon Harris?

A. Construction Engineering, Design Engineering, Corporate QA Audit Group, Engineering and Construction QA Group and site engineering inspection and construction QA unit personnel have responsibility for identifying safety-related problems.

Q. Do they have qualifications to do this job?

A. Yes, CP&L attempts to hire personnel who possess the qualifications through previous experience and qualification and then train to the project requirements. Personnel assigned to these jobs are trained and qualifications documented prior to being assigned as inspectors. NRC routinely audits the training and qualification records and the corporate audits of these records.

Q. Do these people have the authority to deal with these matters?

A. Corporate level audits and engineering and construction QA surveys receive top management attention. All the CP&L construction engineers, inspectors and site QA examination, inspection and test personnel have authority or access to stop work authority or to reject work or materials.

Q. Do they do it, and does the CP&L program work?

A. Yes. Region II of I&E inspection personnel have reviewed reports, verified actions and witnessed specific cases where work was stopped or rejected and corrective actions taken.

Q. Does CP&L have a method of checking and seeing that these problems are dealt with and dealt with correctly?

A. Yes, the nonconforming report system and audit or survey system requires identification, corrective action and verification of corrective action.

Q. What is it?

A. Nonconformance Reports (NCR'S) are used to handle routine and minor problems. Deficiency and Disposition Reports (DDR's) are used to document major problems or engineering document deviations requiring engineering evaluations.

Q. Does CP&L encourage employees to identify incipient problems?

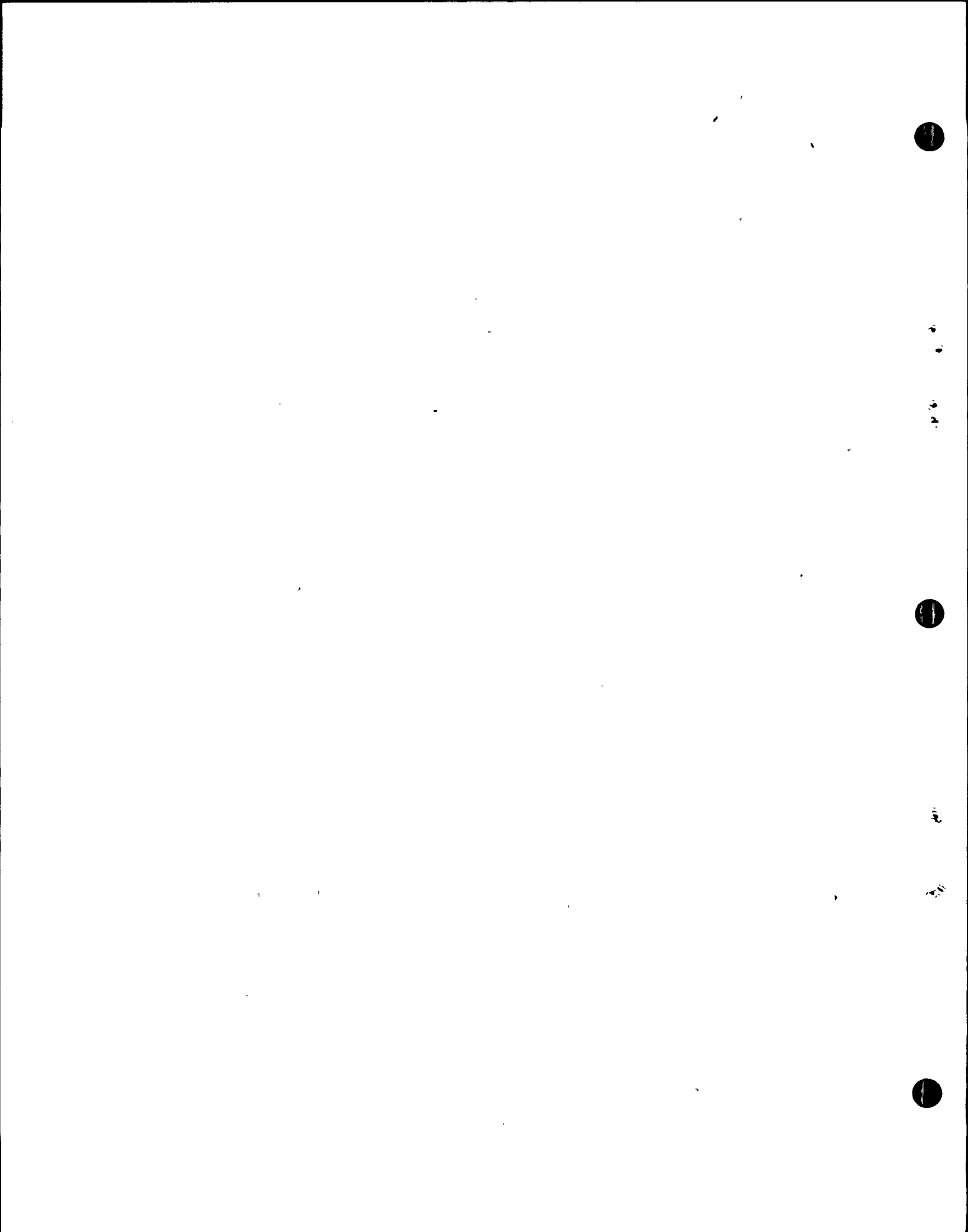
A. Yes. Either informally through the unit supervisors or through the NCR's and DDR's, corporate audits, engineering and construction and site QA surveys. CP&L employees are trained to consider generic implications of related problems.

Q. Does it work?

A. Yes, the system provides a mechanism for identifying, documenting and correcting the specific problems and make necessary changes to the QA program procedures to minimize future recurrence.

Q. Is such a program necessary?

A. Our opinion, yes, it is good management practice.



Q. How does CP&L deal with safety-related problems and incidents arising in the construction of Shearon Harris?

A. Nonconformance Reports are reviewed for significance by the CP&L site principal QA specialist. If the reports are determined to be significant the principal QA specialist will write a Deficiency Disposition Report. Evaluation for Part 21 and Construction Deficiency Reporting is required on all DDRs. QA audits and survey problems are identified and resolved on a case-by-case basis.

Q. Who identifies the various types of problems?

A. Discipline oriented inspectors, engineers, and QA audit and survey personnel.

Q. What are their qualifications?

A. Qualifications are related to their training. Their qualifications are consistent with the requirements of their positions. We have verified the qualifications of individuals on a sampling basis.

Q. Is action taken to correct problems in a timely manner?

A. Our experience is that CP&L personnel are taking corrective actions in a timely fashion. Open Nonconformance Reports are reviewed at least once per month, Deficiency and Disposition Reports receive special attention. Audit and survey report findings are dealt with on a case-by-case basis.

Q. Do the CP&L people who handle these problems have the authority and ability to correct the problems?

A. Procedures are provided for corrective action to be initiated and resolved by personnel and/or groups that had the initial responsibility. QA routinely verifies the corrective action program.

Q. What checks does CP&L have to see that action is timely taken on safety-related problems in the construction of Shearon Harris, and that such action corrects the problem?

A. As we have stated, CP&L has a formalized documented system for identifying, documenting, evaluating and closing out of safety-related problems. The I&E inspectors routinely review the NCRs and DDRs for proper resolution. Problems are documented, assigned unique identification numbers for traceability, evaluated by appropriate engineering and QA personnel and close out is required.

Q. What is the basis of your answer?

A. Region II of I&E has reviewed the related control procedures, discussed the matter with responsible CP&L personnel and observed the immediate action to correct certain conditions by CP&L construction and QA management personnel. The IE inspectors routinely review CP&L's activities relative to NCRs, DDRs, Construction Deficiency Reports (CDR), Inspection and Enforcement Bulletins and Circulars.

Q. Do these checks work?

A. On the basis of our observations and verifications of corrective action during followup inspection efforts, we conclude they do.

Q. What was the scope of NRC inspections during construction of the Robinson facility?

A. Construction Permit No. CPPR-26 was issued to HBR-2 on April 13, 1967, and Operating License No. DPR-23 was issued on July 13, 1970. During the construction period the NRC performed thirty-six site, corporate and vendor inspections of construction related activities. These inspections were performed in accordance with internal inspection procedures and



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100



instructions. In keeping with the practice that was in effect during the time period that HBR-2 was in the construction phase, all of the construction inspections were announced, i.e., licensee was informed of our planned inspection.

To accomplish this program, 18 experienced inspectors spent approximately 325 mandays at the construction site, contractor offices and vendor manufacturing facilities.

Q. What were the main deficiencies found during the construction of Robinson?

- A. (a) Corrosion of containment building tendon test bars was detected requiring an extensive investigation and evaluation to be conducted by the licensee.
- (b) Cracks were found, by the licensee, in the welds of the containment penetration frames after installation. An extensive effort resulted in the shop welds being cut out and repaired in place.
- (c) A sample check of redundant electrical cables revealed separation conflict with the design criteria. A 100% audit of installed cables, by the licensee, resulted in the installation of 9 new cables to effect operation of safety-related circuits.



Q. Mr. Bryant, are you personally familiar with the matter involving the corrosion of tendons?

A. Yes.

Q. Is this the same matter identified as 2.a(1)(a) at p. 10 of the staff's testimony following Tr. 2076?

A. Yes.

Q. How are you familiar with this matter?

A. Although I was not employed by the Atomic Energy Commission until approximately four months after the AEC was made aware of the original corrosion problem, as assigned principal inspector at Robinson I made followup inspections on the problem. Also, I was personally aware of subsequent tendon problems.

Q. Describe the Robinson tendon system.

A. The tendon system is composed of 130 groups of six bars each in six-inch conduit extending from within the base mat to the spring line. Bars are

1-3/8" in diameter with a design yield strength of 140,000 psi and ultimate strength of 160,000 psi. Originally, bars were protected against corrosion prior to final grouting by a vapor phase inhibitor.

Q. What problems were encountered, when, and who discovered the problems?

- A. a. On February 7, 1968, the licensee reported to Region II that the AE, Ebasco, had found, on December 15, 1967, a slight amount of corrosion on several installed tendons. Also, water or moisture was found on all tendons, and one tell-tale bar, which was more heavily corroded, was found to have a yield strength of 15,000 psi less than anticipated.
- b. In November 1969 the lower portion of the personnel hatch was grouted. At this time grout was forced under neoprene seals and ten tendons were partially grouted. During investigations of this, lime water of the same pH of the concrete was introduced into six tendons (five inadvertently). The grout was found by the licensee's agents. The water was found when the sheaths were opened for the Regional inspector's examination.
- c. In March 1970 rainwater entered 54 tendons which had been partially uncovered for tensioning and grouting under anchor plates. Rainwater again entered some tendons in April 1970. This was found by the AE.

- d. In April 1970 the AE found that dry pack grout under upper anchor plates did not have sufficient compressive strength.
- e. In May 1970 one tendon was partially grouted when the grout pump was connected to it at the end of a shift. Expanding grout entered the grout pipe and solidified, partially blocking the pipe. This was discovered by the AE.

Q. What was the resolution to these problems and was it made in a timely manner?

- A. a. An investigation was launched immediately to determine the amount of corrosion. It was determined by the licensee, and concurred in by the NRC and its consultant, that corrosion was negligible. It was during the licensee's investigation that he found one tell-tale bar to be below required strength. This bar also was much more heavily corroded. A vendor foreman stated that he had removed one tell-tale bar from the shipment when he found it to be damaged and had substituted another bar which he thought was from the same heat. Chemical analysis of this weaker bar and thirteen others showed a decided chemical difference between the weaker bar and the others.

The licensee changed to a different method of corrosion prevention. A dry nitrogen atmosphere was substituted and pressure checks were made at regular intervals.

- b. Lime water introduced into the tendons was the same as that prescribed by the PSAR for flushing tendons prior to grouting. The water from each tendon sheath was analyzed. After considerable research and testing these lower tendons were grouted with epoxy sulfide.
- c. Water from the tendons was analyzed and found to have a pH of approximately 11, the same as the lime water. The tendons were pumped with dry nitrogen until there was no oxygen present.
- d. All grout was removed and replaced by a new mix under carefully controlled conditions. Tests on this grout revealed compressive strength of 7,000 psi in five days.
- e. Grout in the tendon fill pipe was partially removed by a chelating agent until the tendon could be grouted.

The above conditions were corrected in a timely manner. Many of the actions were witnessed by Region II and final results were reviewed by Division of Reactor Licensing (DRL) to determine if there had been permanent damage to tendons.

For these reasons we have concluded that actions were taken in a deliberate manner with full investigations and careful research, as quickly as was reasonable considering the status of construction.

Q. Are these incidents any reflection of CP&L's ability to run a QA/QC program?

A. These incidents bear no particular relationship to CP&L's ability to run a QA/QC program except that the experience probably indicated to them the need to have such a program.

Q. Why?

A. H. B. Robinson was a turnkey project. Such QA/QC programs as there were in those days were conducted by Westinghouse and Ebasco. Since CP&L was heavily involved in pressing for complete evaluation of problems and better control, it demonstrated that they are indeed responsive to problems.

Q. Mr. Bryant, is the matter involving the penetration frames referred to above the same as that in item 2.a(1)(b) at page 10 of the staff's former testimony following Tr. 2076?

A. Yes.

Q. Mr. Bryant, looking at the following item on page 10 - item 2.a(1)(b), what do you know about that?

A. The penetration frames are massive steel frames which transmit the strength of the reinforcing steel across the penetration area. They are formed of 1-inch to 2-inch steel and range from about six feet by six feet to approximately ten feet by twenty-four feet.

On June 6, 1968, an Ebasco QC supervisor found two cracks in the web of a frame during an onsite inspection. Subsequent ultrasonic examination by Ebasco determined that there were cracks in all of the frames.

CP&L reported this matter to Region II on August 19, 1968.

Q. Did the applicant properly handle that matter in a timely fashion?

A. Yes. Two frames, which had not been installed, were returned to the vendor for repair. Meanwhile the licensee and AE conducted an

investigation into cause of the failure. It was determined that the fault lay in improper weld procedures and inadequate NDE by the vendor.

The remaining four frames, had been installed. After examination of the vendor's shop and planned repairs, it was determined by Ebasco and the licensee that installed frames would be repaired by Ebasco.

Repairs involved grinding all welds down to sound metal, rewelding, and magnetic particle and ultrasonic examination of each weld repair.

I believe that repairs made were considerably more costly than the original fabrication contract.

Q. Is that incident any reflection on CP&L's ability to run a QA/QC program and why?

A. No. The problem was identified by the AE's QC program. Robinson was a turnkey contract. CP&L was instrumental in organizing the corrective action effort which was conducted under careful quality control.

Q. Mr. Bryant, is the problem involving the electrical cables the same as the matter referred to as item 2.a(1)(c) at p. 10 of the staff's former testimony following Tr. 2076?

A. Yes.

Q. Mr. Bryant, now looking at item 2(a)(1)(c) at p. 10, what do you know about that?

A. During a routine inspection by an AEC electrical inspector on May 5-9, 1969, the apparent loss of cable redundancy or separation was observed. After many meetings and discussions to arrive at satisfactory criteria to assure redundancy, a check of the installed cable for loss of redundancy was conducted by the licensee using electronic "beepers" which could "talk" thru the attached cable or wire and allow physical tracing of the cable along its course thru cable trays or conduit.

To be assured of completely redundant circuit separation, a 100% audit was made by the licensee using the "beeper". Those lines found to conflict with the separation philosophy were "dead-ended" where they were and a new line was pulled to provide the required separation.

Q. Did applicant properly handle that matter in a timely fashion?

A. Yes. The time during which this was going on was a time that QA/QC activities were being developed by the AEC and industry. The licensee was developing his QC function at that time. For example, the use of color-coded wires was being "looked into" by Westinghouse as a possible method of visually tracing for separation. Throughout the eleven-month (from May 8, 1969 to April 24, 1970) history of this problem, the licensee was cooperative and willing to respond correctively to the intent of guidance on this subject as offered by the AEC inspectors.

Considering the magnitude and complexity of the problem and the time frame during which it occurred, the applicant did properly handle this matter in a timely fashion.

Q. Is that incident any reflection on CP&L's ability to run a QA/QC program?

A. No. The function of the term "QA/QC program" at that time was in its infancy. The solution of this problem more reflects on the ability and willingness of the licensee's engineering, supervisory and management staff to appreciate and solve the inherent technical problems that arise during an undertaking like the construction of a nuclear power plant. Also, H. B. Robinson was a turnkey project.

Q. What were the items of noncompliance found at Robinson during construction?

A. During construction of Robinson the term "non-compliance" was not used. Items were entered into reports as "construction deficiencies" or "non-conformances" with the PSAR or the codes. Appendix A, to this testimony, lists 16 items which were listed as non-conformances or construction deficiencies in Robinson inspection reports. By current standards several of these would not have been cited as non-compliances. Further, also some of these were listed when there was insufficient evidence to determine compliance or non-compliance. By current standards they would not have progressed beyond the "unresolved item" category. Conversely, there may be items within the docket file for Robinson which were not cited, but which would be cited by today's standards. However, all items whether listed in Appendix A or not were satisfactorily resolved prior to the issuance of the operating license.

Four items of noncompliance were identified as a result of inspections of the licensee's vendors. Of these, two items were identified in the steam generator fabrication program related to material and code requirements and inspection documentation. Two items were identified in the QA program, involving the failure to follow QA procedures.

Four items of noncompliance were identified in the concrete and containment erection program. All four items were identified in the concrete program related to reinforcement and concrete placement.

Two items of noncompliance were identified in the welding and NDE programs. One item was related to failure to radiographically inspect part of the containment liner. The other related to quality of welding of incore instrument connections.

Four items of noncompliance were identified in the piping, supports and mechanical equipment programs. Of these, one item was identified in the piping program related to steam generator nozzles. One item related to pumps not meeting design criteria. One item was related to the failure of a nozzle.

One item of noncompliance was identified in the instrumentation and electrical programs related to cable trays exceeding their specified load limit.

Two items of noncompliance were identified in the QA program including one item involving the internal audit program, and one item involving failure to adhere to the QA program:

The noncompliances were random in nature and are not indicative of failures in CP&L's management. The safety significance of these items was individually analyzed by CP&L and, in turn, by the NRC. In each case it was CP&L that identified the corrective actions and measures taken to preclude recurrence. The corrective actions were confirmed through NRC inspections.

Q. What was the scope of NRC inspections during the construction of the Brunswick facilities?

A. The construction permit was applied for on July 31, 1968 with the Construction Permit Nos. CPPR-67 and CPPR-68 issued on February 7, 1970. Commencing on May 29, 1969, there were forty-nine inspections of construction related activities at the site, corporate offices and vendors performed on Unit 1 and forty-six inspections of construction related activities at the site, corporate offices and vendors performed on Unit 2.

These inspections were performed in accordance with internal inspection procedures and instructions.

To accomplish this program, 27 experienced inspectors spent approximately 480 mandays at the construction site, contractor offices and vendor manufacturing facilities.

Q. In regard to the items involving the turnover of welders, is that the same as the matter reported as item 2b(1)(a) on p. 12 following Tr. 2076?

A. Yes.

Q. Mr. Bryant and Mr. McFarland do these matters show anything about CP&L's management ability, if anything?

A. During the year 1972, the welder turnover rate was 197%. Welders must be qualified in accordance with ASME specifications. The licensee discovered that a majority of the welders did not maintain the requirements to continue welding in accordance with these specifications. In addition, welders are a travelling craft and will work where the salary including overtime is the greatest, all things being equal. The licensee's corrective actions were to retain a welding consultant, improve the welding school since some welding involved "newer" materials that the average welder was not familiar with or may

have never welded before, and increase the welding quality control staff. Trend analysis was also instituted so that welders having problems with certain materials or weld configurations could be identified and more training initiated. CP&L's handling of this problem reflects well on the ability of their management.

Q. Mr. Bryant, is the matter involving the concrete voids the same as reported as item 2b(1)(d) on page 12 following Tr. 2076, and what do you know about it?

A. On June 9, 1971, RII was notified by CP&L that tests had identified voids between the Unit 2 steel torus liner and the concrete placed around the liner. Voids were subsequently found under the Unit 1 torus liner also. The void areas were mapped and repaired by pressure grouting with epoxy resin. Grout holes drilled through the torus liner were later weld repaired and leak tested. On June 1, 1974, CP&L reported that some epoxy grout under the Unit 1 torus had failed to harden. This was indicated by mixing pot samples taken during the grouting process. Tests were performed to determine the effects of these voids on the structural integrity of the torus. NRC has conducted numerous inspections of procedures, repair work, QA/QC activities and test operations. NRC has examined the engineering analysis and CP&L's final report and has no further concerns.

Q. Mr. Bryant, look at item (2)(a) on page 11 of the testimony Mr. Dance formerly gave in this procedure following transcript page 2076. Can you tell me when the incident recounted there transpired, and what happened?

A. On April 28, 1970, a complete failure occurred in a six-inch diameter transition piece between the steam line from steam generator number 3 and a main steam safety valve attached to that line.

This occurred during hot functional testing, with the system close to rated temperature and pressure, while the safety valve which blew off was being set to relieve at the proper pressure. Seven licensee and contractor personnel were injured.

Q. What was the probable cause of this failure?

A. The probable cause was improper design which did not adequately consider thrust forces when the safety valve operated.

Q. Did CP&L have a QA/QC program at that time?

A. No formal program as we know them today.

Q. Did NRC require such a program?

A. No. Not at that time.

Q. Who had design responsibility for this matter at that time?

A. The Architect Engineer, Ebasco Services, Inc.

Q. Was the matter corrected in a timely and adequate manner and how was it corrected?

A. The matter was corrected in a timely manner and adequately. The transition pieces were redesigned and made much stronger. All main steam safety valve transitions were modified in this manner. In addition, the support and bracing system for the steam line and valves was strengthened. Also, design of other plant safety and relief valves was reviewed.

Q. Mr. Bryant, going to item (2)(b) on page 11 of Mr. Dance's former testimony, will you describe this incident and when it happened.

Q. On March 14, 1971, low DC voltage resulting from an operator failing to terminate a DC powered turbine lube oil pump test at the specified

time resulted in wiping of eight turbine generator bearings, damage to a turbine rotor and a jack shaft and some damage to a turbine shroud. Also one reactor coolant pump shaft was warped. The reactor was operating at 85% power at the time.

An auxiliary operator had, according to procedure, started the DC turbine lube oil pump for a routine weekly two-hour test run. The operator became involved in other duties and forgot to stop the pump. After four hours and twenty-five minutes the station A battery was depleted. The reactor trip breakers opened due to loss of coil voltage, followed by a turbine trip.

Station power demand transferred to the startup transformer, however, emergency bus No. 4 did not energize since tie breakers to the startup transformer were powered from battery A. The AC lube oil pump was powered from emergency bus No. 4. Thus, the turbine coasted down without proper lubrication.

The reactor coolant pump shaft was warped due to interrupted shield cooling water flow as the result of a valve which closed due to low voltage.

Q. Did CP&L have a QA/QC program at this time?

A. There was no formal program as we have today.

Q. Did NRC require a QA/QC program at that time?

A. NRC had not formalized requirements at that time.

Q. Was appropriate corrective action taken to repair damages and what action was taken?

A. All damaged equipment was returned to vendors for repair or replacement. Complete repairs were made and the unit returned to full operation within two months. The licensee did considerable research into increased protective systems. The only change found to be appropriate was the addition of annunciators in the control room to indicate low DC voltage and battery charger trip. Operators were reinstructed to close attention to procedures.

Q. Was the incident a reflection on CP&L management capabilities to operate a nuclear plant - why?

A. I do not feel that the incident was a reflection on CP&L management competence. It was an operator error. Management took all reasonable precautions to prevent recurrence.



Q. What items of noncompliance were found during inspections of the construction of the Brunswick facilities?

A. These items are tabulated in Appendix B to this testimony and are summarized below. The classifications of these items using current definitions shows 26 infractions and 6 deficiencies.

Eight (8) items of noncompliance were identified in the concrete and reinforcing steel program. Of these, five (5) were identified in the concrete program related to concrete process control and three (3) items were identified in the reinforcing steel area (Cadwell splicing).

Twelve (12) items of noncompliance were identified in the welding and NDE programs. Of these, six (6) items were identified in the welding program related to procedure qualifications, welder qualifications and electrode control and certifications. Six (6) items were identified in the NDE program in the areas of radiography, ultrasonic testing, dye penetrant testing, and personnel qualifications.

Three (3) items of noncompliance were identified in the piping, supports, and mechanical equipment programs. All three were in the area of records pertaining to certain safety-related nuclear valves.

Three (3) items of noncompliance were identified in the instrumentation and electrical programs. Of these, two (2) were in the area of redundant system cable separation criteria and one (1) was in the area of process control of electrical inspections.

Six (6) items of noncompliance were identified in the QA program in the areas of procedures, document control, control of purchased equipment, records, and equipment status.

Q. What do these items of non-compliance show, if anything?

A. An analysis of the 32 items of noncompliance identified during construction indicates that twenty-six (26) items were identified as infractions. That is, if they had remained uncorrected they could have resulted in the failure of a Seismic Category I system or structure in such a manner that the safety function or integrity would be impaired.

The safety significance of these items was individually analyzed by CP&L and, in turn, by the NRC. In each case, CP&L identified the corrective actions and measures taken to preclude recurrence. The corrective actions were confirmed through NRC inspections.

These noncompliances were random in nature and were not indicative of failures in CP&L's management.

Q. Was there any trend in CP&L's management involvement in QA/QC activities at Brunswick?

A. During the latter part of construction at Brunswick 2, CP&L management increased their on-site participation in on-site construction and QA meetings. CP&L management also provided increased QA/QC manpower and contracted for special consultants for on-site work as needed.

Q. What changes did CP&L make, if any?

A. Organizational changes in management to better utilize the engineering and construction QA management capabilities and provided more engineering and QA/QC personnel on site.

Q. What was the effect of those changes?

A. CP&L has developed an extensive QA program and is presently managing Shearon Harris construction and site QA/QC functions.

Q. What changes, if any, has CP&L management made to strengthen QA/QC procedures in construction?

A. CP&L has developed and is implementing a new site QA/QC program and procedures. The procedures are being written and reviewed by QA personnel who have Brunswick or other nuclear plant construction experience. The procedures are written to implement and verify Ebasco specifications and SAR commitments.

Q. Do these changes work?

A. They have proven to be effective for that work completed and the work that is presently in process.

Q. What is the basis of your answer?

A. Personal experience, review of the site program and procedures, discussions with Region II of I&E inspectors, and knowledge of the ability and capability of associated CP&L personnel. IE inspection reports reflect that procedural control for that work completed and work that is in process is acceptable.

Q. What has been CP&L's experiences in the construction of Shearon Harris to date?

A. Carolina Power and Light Company (CP&L) filed an application for authorization to construct and operate four pressurized water nuclear reactors known as the Shearon Harris Nuclear Power Station Units No. 1 through 4 in North Carolina on September 7, 1971. The construction permit exemptions which authorized limited work at the site was issued on January 14, 1974. NRC inspectors began inspections of construction activities on February 11, 1972. On May 7, 1975, CP&L informed NRC of the extended construction delay. On January 27, 1978 Construction Permit Nos. CPPR-158, 159, 160 and 161 were issued.

During the period February 11, 1972 through October, 1978, Region II conducted 24 inspections related to Harris construction activities both at the site and corporate offices. Included are seven inspections, from July 1, 1975 through September 1, 1977, related to the extended construction delay, which includes site storage facilities, facilities maintenance, equipment storage and records.

The 24 construction inspections have employed 21 experienced inspectors for approximately 105 mandays at the construction site, corporate offices and vendor manufacturing facilities. Major components including reactor vessels

and steam generators for the construction of these units are in storage at the site. Current activities have consisted of the placement of the containment buildings concrete base mats for Unit 1 and the erection of the containment liner.

As this Board was previously informed, a "minor geologic fault" was found during excavations at the site. NRR concluded this fault was not capable within the meaning of Appendix A to Part 100 of 10 CFR. NRC staff inspection of applicant's geologic map and discussions with the applicant's architect-engineers have not shown any condition significant to nuclear safety.

A possible foundation anomaly was also discovered in excavation for the spillway of the main dam. Although this is not a category I safety structure, a safety study is being made by NRC staff geologists and the applicant has been requested to do further mapping.

Q. What items of noncompliance have been found by NRC so far in the construction of Shearon Harris?

A. Construction inspections and the related items of noncompliance tabulated in Appendix C are summarized below. The classification of these items utilizing the current definitions of violations, infractions, and

deficiencies indicate that there were two infractions and one deficiency.

One item of noncompliance was identified in the placement of concrete for the power block structure. This item related to sampling inspection of concrete during placement when pumps and other conveyances are being used.

One item of noncompliance was identified in a site contractor's containment welding program and it related to documentation for electrode control.

One item of noncompliance was identified in the QA program pertaining to control of documentation. This item involved control of revised drawings with outstanding field change requests.

Q. What do these items of noncompliance show, if anything?

A. An analysis of the three items of noncompliance identified during construction of this four unit facility indicates that two items were identified as infractions. That is, if they had remained uncorrected, they could have resulted in the failure of a Seismic Category I system or structure in such a manner that the safety function or integrity would be impaired. These noncompliances are random in nature and are not indicative of failures in CP&L's management, nor inadequacies in the QA program.

The safety significance of these items was individually analyzed by CP&L in turn, by the NRC. In each case, CP&L has identified the corrective actions and measures taken to preclude recurrence. The corrective actions were confirmed through NRC inspections.

Q. Does CP&L and its construction supervisor have sufficient QA/QC and management people presently employed for the phases of work now going on at Shearon Harris?

A. Yes. There has been some problem with the obtaining and retaining technically qualified and competent inspection personnel. However, CP&L has been able to supplement its staff with qualified contractor personnel. This retention problem has not impacted construction schedules nor impacted on the quality of construction work, and CP&L is actively recruiting personnel.

Q. Are these CP&L people properly trained?

A. Yes.

Q. What is the basis of your answers?

CP&L is meeting its commitments to NRC as documented in the Region II of I&E inspection reports. The NRC inspection and enforcement program will

assure that CP&L will meet their commitments to provide adequately trained and qualified QA and management personnel.

Q. Do you believe that CP&L and its constructor will continue to have sufficient, properly trained management and QA/QC people in the construction of Shearon Harris?

A. We believe at this time that CP&L does have sufficient resources to accomplish this. Appropriate NRC enforcement action will be taken to assure this level is maintained.

Q. Is inspection of CP&L during the start-up operation for a nuclear plant the responsibility of the Construction Branch or the Operations Branch of the NRC I&E office in Atlanta?

A. The responsibility for construction inspections and assist inspections performed by members of the Construction Branch are the responsibility of the Construction Branch. The responsibility for inspections of operations tests including start-up and operation of a facility are the responsibility of the Operations Branch.

Q. What trends have you seen in CP&L's responsibility as to management capability? Please give details.

A. We do not collect the types of data that could be utilized in a formal trend analysis and therefore our response is more subjective than it would be if a formal analysis had been made. Based upon our reviews of the docket files and direct but limited to knowledge of the construction of Robinson and Brunswick, we would conclude that CP&L management has improved. CP&L's direct role in Robinson was limited since it was a turnkey project. During the construction of Brunswick, CP&L management was more involved. They are even more involved at Harris. During this time, NRC's requirements have become more stringent and our inspection program is more mature and effective. CP&L's compliance history at plants under construction has not given us cause for concern. This is indicative that management is probably more effective in light of their increased participation and our increased expertise in identifying problems.

Q. What trend have you seen in CP&L's QA/QC programs in the construction area? Please give details.

A. Our response to this question is essentially the same as our response to the last question relating to CP&L's management. Appendix B to 10 CFR 50 establishing

QA requirements became effective in mid-1970. Guidance was not immediately available to industry, and, in fact, it was in July 1973, that AEC/NRC met with industry, including CP&L, to provide guidance. The requirements imposed upon industry by Appendix B were much more stringent than previous requirements. CP&L's performance subsequent to this time has not revealed any substantive deficiencies in their construction QA/QC program.

Q. Do you have any remaining concerns on the ability of CP&L to construct Shearon Harris properly?

A. Based on our reviews of the dockets and our discussions with members of the Branch staff, no issues have been raised which gives us concern regarding CP&L's ability to construct the Harris facility.

Q. What factors did you consider, and what is the basis of your answer?

A. We have considered those factors which the staff members have testified to in their prepared statements. The bases for our answer is the performance of CP&L's past performance as documented in our inspection reports.

Q. Do you believe CP&L is presently, properly, using its resources to assure the proper construction of Shearon Harris.

A. Yes.

Q. Is it doing so in a timely manner?

A. Yes.

Q. Is it doing so in a thorough manner?

A. Yes.

Q. Is it doing so in an effective manner?

A. Yes.

Q. On what basis have you given the preceding answers?

A. Our answers have been based upon the inspections already conducted in accordance with the NRC construction inspection program, which included selective examination of procedures and representative records, interviews with craftsmen and site personnel as well as in-depth observations by the inspectors. There is reasonable assurance that CP&L can construct and the equipment can be installed in accordance with SAR commitments. The licensee has previously demonstrated his commitment to construction QA at the Robinson and Brunswick

Nuclear Stations by expanding his involvement in the construction program. This includes taking corrective actions on identified deficiencies and by staffing construction engineers and QA/QC inspectors at the construction site.

Written procedures are presently available for construction related activities and the results of IE's inspections verify that personnel are trained in these procedures. The licensee has instituted a QA/QC program and has been responsive to any inquiries or problem areas that have developed. However, if through the NRC's inspection program, it is discovered that the licensee is not constructing Shearon Harris in accordance with SAR commitments which could endanger the health and safety of the public, appropriate enforcement action will be instituted.

CP&L is meeting its commitments to NRC as documented in the Region II I&E inspection reports. They have demonstrated effective capability for meeting quality requirements for work already completed and that work in process at Shearon Harris. For problems outside the scope of expertise of CP&L, Ebasco, and Daniel, CP&L can hire consultants as they did for the Brunswick project.



APPENDIX
UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

COPY

OCT 03 1978

SSINS 400, 401, 402, 403/F

MEMORANDUM FOR: Reactor Construction & Engineering Support Branch Staff

FROM: C. E. Murphy, Chief
Reactor Construction & Engineering
Support Branch

SUBJECT: INSPECTION FINDINGS AT SHEARON HARRIS NUCLEAR PLANT
AND OTHER CP&L FACILITIES

As you may be aware, the Commission has remanded the Harris proceedings back to the Hearing Board on the basis that the Board may have been misled by the testimony of staff witnesses.

Members of the RC&ESB are presently preparing testimony for the remanded hearing. It is very important that the testimony presented to the Board accurately reflect the findings of our inspection and the professional judgements of those from this Branch who have performed inspections of CP&L facilities. The testimony will include discussions of our inspection findings not only at Harris but also at Brunswick and Robinson. We have also been directed to provide testimony relating to the ability of CP&L management to manage all those activities associated with the construction and future operation of Harris.

Each of you is requested to provide me in writing by October 16, 1978 the answers to the following:

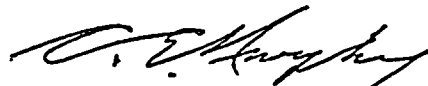
1. Have you ever performed an inspection or investigation of CP&L corporate offices, Robinson, Brunswick, or Harris?
2. If the answer to 1 is yes, did the inspection report adequately and accurately reflect your inspection (or investigation) findings?
If the answer is No, please describe.
3. If the answer to 1 is yes, do you have any evidence, including your professional judgement, that would reflect favorably or adversely on the capability of CP&L management to construct or, in the future, operate Harris?
If the answer is yes, please describe.



4. Please discuss any matters relating to the CP&L management or facilities not encompassed by the above questions that might be beneficial to the Board in arriving at their decision.
5. Have you formed an opinion concerning CP&L's capability to construct and operate Harris? If so, what is your opinion?

I want to stress the fact that you can appear before the Board to testify if you so desire. If you should so choose please advise me promptly.

This special request for information should not be construed as an attempt to obtain information either in support or in opposition to licensing the facility but rather to present complete and factual testimony to the Board in an area which the Board has expressed concern.



Charles E. Murphy, Chief
Reactor Construction and Engineering
Support Branch

WRB/wbl

1 MR. GORDON: I have a few cross-examination ques-
2 tions for the panel.

3 CHAIRMAN SMITH: Do you want to lead off?

4 MR. GORDON: All right.

5 CROSS-EXAMINATION

6 BY MR. GORDON:

7 Q From what I can tell of the compiled testimony
8 this is construction personnel; is that correct?

9 A (Witness Murphy) That's correct, sir.

10 Q The consensus seems to be that CP&L has the
11 management capability to constuuct the Shearon Harris plant?

12 A That would be our testimony, sir.

13 Q It says on the questions that were asked, What
14 sources and what negative and positive factors did you con-
15 sider? It seems that there are no negative factors particularly
16 mentioned. What I would like to do is to talk specifically
17 about what are the current problems or negative factors of
18 the management ability of CP&L to construct the Shearon Harris
19 plant.

20 Now do you know of any particular current negative
21 factors on the management ability of CP&L?

22 A I would like to put in some clarifying remarks
23 and then have other comments on this.

24 You could consider that any outstanding non-
25 compliance is a negative factor. If the non-compliance is not

11.1090

wb2

1 of high immediate significance or if we feel with reasonable
2 certainty that we can obtain a resolution to this non-
3 compliance by our own internal enforcement actions, then we
4 would not consider these as negative points. However, in the
5 fact that there are non-compliances probably outstanding, I
6 would like to have those described so that the Board may use
7 them in their findings.

8 A (Witness Herdt) In the testimony there is a list,
9 and I think it is not with the Panel 2 testimony but it
10 happens to be with the Panel 1 testimony. It's Appendix F.
11 It talks of the -- gives a chronological history of the
12 Shearon Harris inspections starting back in February of '72
13 and going all the way through into October of '78 is what is
14 listed here.

15 In addition to that there have been about six
16 inspections, maybe eight, since the October '78 listing.
17 And in those additional inspections there have been maybe
18 three or four items of non-compliance, two of them I think
19 in the deficiency area and two in the infraction area, talking
20 in the deficiency area about some CB&I -- Chicago Bridge and
21 Iron -- procedures and the failure to follow these procedures.
22 There have been some on the environmental end concerned about
23 dust settlement and siltation. And there has also been one
24 infraction on document control.

25 Q Mr. Herdt, do you think that any of these
deficiencies or infractions reflect on the management ability

wb3

1 of CP&L?

2 A Not from any other facility that we would be
3 inspecting at this time commensurate with the same construc-
4 tion status.

5 Q Is there a current problem with CP&L turnover
6 of personnel, either in the -- well, this is for the entire
7 panel, if anybody is aware of it: Is there a high turnover
8 of personnel, either in the working personnel or the super-
9 visory personnel at the present time that you have noticed
10 from your inspections or from the supervision area?

11 A (Witness Murphy) I have had not had identified
12 to me any problems associated with the performance of the
13 construction activities at Harris that we would attribute to
14 personnel turnover.

15 Q The three of you who currently have had the most
16 experience -- I think Mr. MacFarland, Mr. Herdt and Mr. Bryany
17 on your inspections of the CP&L facilities, I believe all of
18 you have been from Robinson through the Harris plant, was
19 CP&L always cooperative as far as, was information freely
20 given to the inspectors?

21 A (Witness McFarland) I've not been to the Robinson
22 plant. In my inspections of Harris and Brunswick they have
23 been very cooperative in making all documents and personnel
24 available on every inspection.

25 Q Do you agree with that, Mr. Herdt?

wb4

1 A (Witness Herdt) Yes. I've been to all three
2 facilities and have not had any problems.

3 Q Mr. Bryant?

4 A (Witness Bryant) Yes, I do agree. I have not
5 had any problems.

6 Q For the same three: Have you found CP&L is slow
7 to make corrective action on any deficiencies that you point
8 out?

9 A (Witness MacFarland) Negative. They've been slow
10 in their response in all cases.

11 A (Witness Herdt) Their responses, as far as I
12 have been concerned, have been timely and have been respon-
13 sive. This is not only on items of non-compliance but on
14 construction deficiency reports.

15 A (Witness Murphy) I would like to point out that
16 at this stage of construction the immediacy of corrective
17 actions differ greatly from that which would be expected
18 at the latter stages of construction. And it is a far
19 different -- Even with this greater leeway in time,
20 I am not aware of what we would consider as unusually long
21 times to correct the problems that we have identified to
22 CP&L.

23 Q What have you gentlemen found to be the attitude
24 of CP&L toward safety matters?

25 A (Witness McFarland) They've had a very high regard
for safety matters.

11.260

wb5

1 Q Mr. Herdt?

2 A (Witness Herdt) I feel they've been responsive.

3 And I have nothing really to add to that statement.

4 Q Mr. Bryant?

5 A (Witness Bryan) Are you asking about nuclear
6 plant safety?

7 Q Yes.

8 A I have no problem.

9 Q Are there any problems at the current time that
10 you know about that would reflect on CP&L's management ability?

11 A (Witness Murphy) I'm not personally aware of any.

12 Q Mr. Brownlee?

13 A (Witness Brownlee) The inputs I've had, from
14 conversations I've had with other personnel, I will not change
15 my position from my previous testimony. I see none.

16 A (Witness McFarland) I have not inspected CP&L
17 facilities since early '77. At that time there were no
18 problems. I share an office with Mr. Brownlee who is now
19 the principal inspector, and we've not had any discussions
20 of problems.

21 A (Witness Herdt) I'd like for you just to repeat
22 the question again.

23 Q Are there any current problems that you are aware
24 of that would reflect on the management ability of CP&L?

25 A No, sir.

wb6

1 Q The current management ability.

2 A No. I've been to Brunswick and Harris in the past
3 year, and I've had no problems with either one of those
4 facilities.

5 A (Witness Bryant) None that I know of.

6 MR. GORDON: I have no further questions.

7 CHAIRMAN SMITH: Mr. Erwin?

8 MR. GORDON: May I ask one more, please?

9 CHAIRMAN SMITH: Surely.

10 BY MR. GORDON:

11 Q On page 5, gentlemen, of the testimony, you say
12 that li censees -- at the bottom of the page. "Licensee's
13 management capabilities have been adequate...."

14 Now what do you mean by the term "adequate?"
15 Do they just meet the minimum standards, or does it go beyond
16 that?

17 A (Witness Murphy) We have not put a restriction
18 on that limitation as to adequate and totally inadequate.
19 Management capabilities cover a wide range of areas. There
20 are certain areas that we don't even look at; financial, for
21 example.

22 Those areas that we have looked at, we have no
23 identified problems with them.

24 I'm not trying to avoid the question. It is just
25 a complex subject, and we have not drawn a bar graph for each

wb7

1 one of the areas. And it is not intended to say that it is
2 barely passing; it means that we have no problems with it.

3 BY MR. ERWIN:

4 Q Mr. McFarland, on page 3 of the testimony you
5 say you're the principal inspector for the Shearon Harris
6 from December 1972 to February 1977. Now I believe that
7 Mr. Murphy earlier stated that the normal rotation period
8 was three years.

9 A (Witness Murphy) Mr. Erwin, let me respond to
10 that.

11 Q Let me ask my question first, then I will let
12 you respond. The Chairman may wish for you to respond before
13 I ask the question, but I would like to be able to put my --
14 I would like the opportunity to ask my question first.

15 Are you the person that Mr. Murphy was referring
16 to as having spent the longest time at a certain plant?

17 If I didn't misunderstand Mr. Murphy's earlier
18 testimony, he said that they ranged from under three to as
19 much as four-plus. And I calculate December 1972 to
20 February 1977 to be the four-plus.

21 Are you the person that he was referring to?

22 I'm addressing the question to Mr. McFarland,
23 not to Mr. Murphy.

24 A (Witness McFarland) Yes, I am. These dates are
25 correct in the report. Due to the status of the project, part

wb8

1 of this was pre-CP exemption, in the early stages. There
2 was relatively little or no activity on the site that was
3 safety-significant. The policies relative to the three-year
4 turnover period were not that firm at that time. Several
5 such combined thing made it appropriate to continue that
6 activity.

7 CHAIRMAN SMITH: The suspension of the proceedings,
8 was that taken into account, Mr. Murphy?

9 WITNESS MURPHY: Sir, to have been totally
10 correct in my statement on three years, it was to active
11 construction sites. For a great period of time Harris was
12 not active.

13 Mr. McFarland, actually, considering the plant
14 activity, would have been less than the three years, though
15 it was greater than three calendar years.

16 BY MR. ERWIN:

17 Q Mr. Murphy, then Mr. McFarland was not the person
18 you were referring to who stayed as long as four-plus years?

19 A (Witness Murphy) There may have been one or two
20 people in that category. I believe possibly there was a
21 member at the St. Lucie facility that may have exceeded three
22 years slightly.

23 Q Now on page 4 you state,
24 "Our inspections, as our testimony will
25 show, have not revealed examples of repetitive or
systematic problems,"

wb9 1 Now would you define what repetitive and
2 systematic means in the context of your answer?

3 A (Witness McFarland) The answer at the bottom of
4 page 4?

5 Q Yes.

6 A And your question is, What would have revealed
7 repetitive or systematic problems?

8 Q It says, "Our inspections...." It's the answer.

9 A At the bottom of page 4 or the bottom of page 5?

10 Q The bottom of page 4. I believe you state that--
11 There's an answer that reads,

12 "Our inspections, as our testimony
13 will show, have not revealed examples of repetitive
14 or systematic problems. Systematic or repetitive
15 failures would be indicative that the management
16 control system was not functioning properly...."

17 I'm just asking how you define repetitive or
18 systematic in the context of this answer.

19 A If on a series of inspections we would have found
20 deficiencies in document control, procedure control, any of
21 the other criteria in Appendix B of 10 CFR 50, we would have
22 considered these as repetitive. There have been repetitive
23 deficiencies in handling material at the warehouse or in
24 areas such as concrete, although they had not done any con-
25 crete at that time. But that's the idea of repetitive.

wb10

1 With systematic problems, if there would have
2 been problems within one discipline, such as welding or
3 electrical, QC, or storage of materials, or other major
4 areas, that would have been a systematic problem.

5 Q Now this question appears in a line of questions
6 addressed to all of you, I believe. I may be mistaken, but
7 I believe that's so. So I would ask that all of you respond
8 if your answer-- Again, Mr. McFarland qualified his answer
9 saying in this period of time with which he was most familiar
10 this was the case. And I would ask the others to amplify
11 on his statement if they can.

12 Mr. Brownlee?

13 A (Witness Brownlee) During the period that I was
14 assigned principal responsibilities for the Shearon Harris
15 project I found no cases of repetitiveness.

16 Q How do you define it, how do you define repetitive
17 and systematic?

18 A In the local areas that we might be looking at,
19 call them concrete operations, warehousing, storage, what-have-
20 you, if you repetitively come over into areas where we have
21 deficiencies or infractions noted in this, then that is
22 referred to as repetitive.

23 Q More than once, more than five more than
24 ten times?

25 A No, sir. If I go out this trip and I come out next

wbll

the next trip, that's repetitive.

Q So it's more than once. They've never done anything wrong more than once?

A And he'll get cited each time.

Q I'm asking you if your statement that CP&L has never -- that there has never been--

A No, no, you don't ask me that. No. No, that's not what I'm answering.

Q Well you said repetitive--

A You asked me to describe what I understood repetitive to be. That's my understanding.

Q Repetitive means more than once?

A That's right.

Q Okay.

Now you state in your testimony that,

"Our inspections, as our testimony will show, have not revealed examples of repetitive or systematic problems."

Does that mean that your inspections revealed that CP&L has never done anything wrong more than once?

A As I say, during my tenure as the principal inspector for the Shearon Harris project, that those activities that I inspected and those reports that I reviewed as a result of that, did not indicate any systematic programmatic breakdown in the form of repetitiveness. It

wb12

1 did not indicate that in the period February 1977 to
2 October 1978 on the Shearon Harris project.

3 MR. ERWIN: Mr. Chairman, is my question as unclear
4 to you as apparently it is to Mr. Brownlee? I think it's
5 really simple-minded.

6 CHAIRMAN SMITH: I didn't see it to be a direct
7 answer to your question. I did see it to be an effort to
8 give you a complete answer, however. But I think we would
9 progress a little bit better if you were to answer the narrow
10 question.

11 WITNESS MURPHY: Mr. Chairman, I have a problem
12 myself when he says CP&L; we're speaking of Harris here.
13 If he is speaking of CP&L operations or what-have-you without
14 qualifying it, no, we cannot make that statement. If he
15 is speaking of the Harris inspections, that's a different
16 story.

17 MR. ERWIN: Mr. Chairman, I'm referring specifical-
18 ly to page 4 of the testimony of these gentlemen, in which
19 they state,

20 "Our inspections, as our testimony will
21 show, have not revealed examples of repetitive or
22 systematic problems."

23 If they are unprepared to make that statement I
24 wish they had said so.

25 CHAIRMAN SMITH: They're going to answer as soon as

wb13

1 we get--

2 MR. ERWIN: I don't think they've answered it at
3 all. Mr. Murphy at this point is disclaiming the possibility
4 of their answering.

5 WITNESS BROWNLEE: May we answer the question
6 later when can review the chronological history of the non-
7 conformance of this matter?

8 CHAIRMAN SMITH: I'm sorry?

9 WITNESS BROWNLEE: Might we address this at a
10 later time when we can review -- I forget which exhibit it
11 is now, but the non-conformance history, so that we may
12 answer that thing, that question?

13 CHAIRMAN SMITH: I think Mr. Erwin is entitled
14 to his answer now. You can explain. But I think he ought
15 to have his answer now.

16 WITNESS BROWNLEE: Will you bear with us a moment?

17 WITNESS McFARLAND: Appendix F, as previously
18 referred to--

19 CHAIRMAN SMITH: It may very well be you've
20 already answered the question: I don't know. But you're going
21 to answer it again in response to his question.

22 WITNESS McFARLAND: There were two infractions
23 in this one inspection of July '78 which were not related.
24 And there was one deficiency in October of '78 on a subject
25 that was not related to those two. Other than that there were

wb14

1 no items of non-compliance.

2 CHAIRMAN SMITH: There was a little bit of trouble
3 with your question, but I didn't think there was very much.
4 Your question did not make it completely clear that you were
5 talking about the same type of infraction more than once.

6 MR. ERWIN: I was trying to follow-- I was trying
7 simply to determine what they intended their testimony to
8 mean. I read the testimony on page 4, I read it as a line
9 of questioning beginning with,

10 "Gentlemen, for how long has NRC been
11 inspecting CP&L facilities under construction?

12 "ANSWER: Ten years.

13 "QUESTION: Has CP&L established a
14 Quality Assurance Program, or management control
15 system, to control the quality of the nuclear
16 generating facilities it constructs?

17 "ANSWER: Yes.

18 "QUESTION: Have you looked...." "Have you,"
19 referring to these gentlemen, I assume, referring to all of
20 the members of the panel. "Have you looked at CP&L's program"--
21 I assume "program" refers to quality assurance program. "and,
22 if so, what have you found?"

23 "ANSWER: Our inspections, as our testimony
24 will show, have not revealed examples of repetitive
25 or systematic problems."

wb15

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Now I'm simply trying to determine what they mean by that. I read it to mean that over the last ten years, while they have been inspecting CP&L facilities, at no time have any inspections revealed -- and they define "repetitive" as more than once, Mz. Brownlee defined it as more than once.

1 WITNESS MURPHY: Mr. Chairman, I would like to
2 offer a correction to the testimony, to limit this question
3 and such to this Harris facility, because that was what was
4 intended at that point. I'm sorry.

5 CHAIRMAN SMITH: Okay, but I don't think that's
6 the point of disagreement.

7 So the question is limited to Harris?

8 WITNESS MURPHY: Yes, sir.

9 CHAIRMAN SMITH: Now, can it be answered?

10 WITNESS MURPHY: In that context, it has been
11 answered, and the answer is:

12 We have not revealed examples of repetitive or
13 systematic problems at Harris.

14 BY MR. ERWIN:

15 Q Now, may I again ask, since you did not define
16 repetitive in exactly the same manner as Mr. Brownlee, I
17 believe I'm entitled to ask you the specific question of
18 whether your inspections at Harris -- and only at Harris --
19 have revealed examples of problems that have occurred more
20 than once?

21 A (Witness Murphy) Is that for me?

22 Q My question is directed to Mr. Murphy.

23 A I have not inspected Harris personally.

24 Q All right. Can you -- you just stated that
25 inspections at Harris have not revealed examples of repetitive

wei 2

1 systematic problems. Can you state whether your inspections --
2 whether the inspections of your section have revealed examples
3 of problems occurring more than once?

4 A Mr. Erwin, when I was using the term "our" I was
5 meaning my full branch. When you asked me the question
6 specifically, I answered it as it was addressed to me
7 specifically.

8 To my knowledge, my branch has not found items of
9 non-compliance, the same items of non-compliance, at two
10 successive inspections.

11 Q Now let me ask you --

12 DR. LEEDS: Excuse me. I'm having problems here,
13 because Mr. Erwin is reading your answer as examples of
14 problems, and then I hear you answering -- maybe more than
15 one of you -- answering "items of non-compliance."

16 Now, I want to know, is "items of non-compliance"
17 equivalent or equal to, and all the other synonyms that I
18 can think of, with respect to examples or problems?

19 WITNESS MURPHY: In this context, the repetitive
20 or systematic problems would be repetitive or systematic
21 non-compliances, yes, sir.

22 DR. LEEDS: All right.

23 BY MR. ERWIN:

24 Q So is it your statement, then, that at least insofar
25 as yourself, this testimony on page 4 should be amended to

wel 3

1 read, on the third line from the bottom, "repetitive or
2 systematic non-compliances."

3 A (Witness Murphy) Non-compliances would be a
4 synonym within the context that we would use at Harris.

5 Q Now, let me ask you again to be slightly more
6 specific. You answered the question by saying that you did
7 not know of any instances in which non-compliances had been
8 found on successive inspections.

9 Has there been a recurrence item of non-compliance
10 at any time over the life of the construction of the plant?

11 A (Witness Herdt) There's been one area that we've
12 had, and that was in the area of document control. There was
13 an infraction identified back in July of 1978, and there was
14 also one in the early part of this year.

15 Now, it may not have been in the exact same area,
16 but as far as our general context, it is in document control.
17 Exactly what the particulars are, I don't know, right at this
18 moment.

19 Q So, Mr. Herdt, then you state that as far as you're
20 concerned, your answer to the last question on page 4 would
21 read:

22 "Our inspections at Harris, as our testimony will
23 show, have not revealed examples of repetitive or
24 systematic non-compliances, except for..." the stated
25 instance that you just made reference to?

1 A The word repetitive, and I guess systematic, to
2 me means in very close period or a very short period of time.
3 As I have just said, it's been July to the early part of this
4 year, which to me is like eight or nine months. That is not
5 systematic or repetitive.

6 Q So you define systematic or repetitive in a
7 different manner from the definition that Mr. Brownlee gave?

8 MR. ERWIN: May I ask the Reporter to read back
9 Mr. Brownlee's response to my question as to his definition
10 of repetitive or systematic?

11 CHAIRMAN SMITH: My memory is, if it's helpful,
12 is that so far we've had three somewhat different definitions
13 of repetitive, or answers suggesting differences in definition.

14 Mr. Murphy calls them if they happen on two
15 successive visits.

16 Mr. Brownlee says if they happen more than once.

17 And Mr. Hardt says if they happen again in a
18 rather close sequence, in an unspecified time.

19 Okay. So there you are. Mr. Brownlee?

20 WITNESS BROWNLEE: Let me emphasize, at one
21 inspection and then the next one. Did I not come through
22 clear on that? One inspection and then the next one.

23 MR. ERWIN: It didn't come through clear to me.

24 CHAIRMAN SMITH: Well, I think now we have
25 workable uniformity of opinion, don't we?

1 MR. ERWIN: I think we have workable disuniformity,
2 in my opinion -- I mean unworkable disuniformity.

3 I can't see how they can adopt this testimony as
4 their individual testimony, believing or defining this term,
5 or these terms, in the manner that they do.

6 But I'll proceed to the next phase.

7 CHAIRMAN SMITH: Well, that's an observation you
8 can argue, but nevertheless, they've explained it.

9 MR. ERWIN: Well, they've . . . that's right.

10 BY MR. ERWIN:

11 Q There's a sentence on page 5 contained in the
12 first full answer on page 5, which begins, "The Quality
13 Assurance Program in effect at Harris meets requirements
14 that are significantly more stringent than were in effect
15 during the construction of Brunswick and Robinson and our
16 inspections to date indicate that this program has been
17 satisfactorily supplemented." Now, has that been corrected
18 already?

19 A (Witness Murphy) That should be corrected.

20 Q All right. If it had been corrected earlier -- I'm
21 sorry if I'm taking up time.

22 WITNESS MURPHY: Mr. Chairman, I would like to
23 offer the correction that that should be "implemented."

24 BY MR. ERWIN:

25 Q And I presume that -- Mr. Eddelman just mentioned

wel 5

1 that in the next sentence, the word that appears as complaince.
2 That should be compliance.

3 A Murphy's law applies. Not all of the typos were
4 caught.

5 Q Now, to pick up on the Attorney General's question,
6 on page 6:

7 "Can you give us the specific factors both positive
8 and negative..."

9 again, once more, for the record, the only negative -- what
10 does the entire panel consider to be the negative factors
11 upon which they base their prior answer on CP&L's managerial
12 ability?

13 A Mr. Erwin, I would say that the negative factors
14 would be of the same nature that I previously discussed.

15 CHAIRMAN SMITH: Mr. Murphy, unless counsel
16 representing NRC Staff raises an objection to the question on
17 the basis that the question was previously asked and answered,
18 the appropriate course for you is to simply answer it again.

19 If you think it is clarifying to point out that
20 your previous answer you thought was responsive, okay. But
21 counsel is entitled to an answer, unless the question is
22 objected to.

23 WITNESS MURPHY: If we had findings which were of
24 the nature of non-compliances which we did not feel that we
25 could obtain resolution through our normal means, and within

1 a short period of time, and if those negative findings were
2 not of immediate concern, then we would not consider them as
3 being negative.

4 If we identified problems, non-compliances, within
5 CP&L that were of immediate concern to get corrected, and we
6 did not have a mechanism for obtaining that immediate
7 correction, then we would say that we had negative findings.

8 BY MR. ERWIN:

9 Q Now, you used the phrase, "negative findings."
10 Is there any difference between negative findings in your
11 mind and specific negative factors as used in this testimony?

12 There's a difference in my mind. I don't know if
13 there's any in your mind or not. I'm just asking you if
14 there is.

15 A (Witness Murphy) Would you restate your question,
16 please?

17 Q In answer to my question you used the phrase
18 "negative findings."

19 A Negative means in not complying with our -- with
20 the regulatory requirements.

21 Q Well, I'm focusing in on "findings," rather than
22 "negative." You used the word "findings," negative findings.
23 And what I was asking, really, was very specifically what
24 the negative factors, if any, were, upon which you based
25 your prior answer on CP&Ls managerial ability.

well 8

1 In reading the answer to that specific question,
2 I don't find any specific negative factors, and I just want
3 to know whether you . . . it appears to me that the answer
4 to the question on page 6 does not give any specific -- does
5 not answer the question as to any negative factors which
6 might have -- upon which you might have based your prior
7 answer to CP&L's managerial ability. And I wondered if there
8 are any?

9 A In that we did not include negative findings --
10 negative factors in our response, we felt that this identified
11 that there were no negative factors.

12 Q Are we correct in assuming, then, that a
13 non-conformance report or a deficiency report--that you
14 consider resolvable is not a negative -- is not defined by
15 you to be a negative factor?

16 A A non-conformance report can cover a very wide
17 range of factors, and there is no simple yes or no answer
18 to that.

19 If a non-conformance report identified a major
20 problem that would be of the non-compliance type, then
21 certainly it would be a negative factor.

22 Q You say that a non-conformance report that
23 indicates non-compliance you would consider a negative factor?

24 A Mr. Erwin, the testimony in response below the
25 answer in line 6 of the second paragraph does discuss what

wel 9

1 we have looked at and what we are trying to scope into our
2 response to this question.

3 I'm not sure in my own mind really what your
4 question is, because I'm not aware of your knowledge or lack
5 of knowledge of the documents that are referred to here.

6 Q I'm asking whether you . . .

7 (Pause.)

8 A Okay.

9 Q I'm asking you to define the words that you use
10 in your testimony. And I'll ask you once again, and I believe
11 I have the right to do so:

12 Whether or not you define negative factor as used
13 in the question, and presumably as understood in the answer
14 on page 6, to include non-conformance reports that indicate
15 non-compliance?

16 A As related to management ability -- the question
17 is specific to management ability, I believe, and negative
18 factors.

19 A non-conformance report that reflected adversely
20 on management ability to the extent that we would take
21 enforcement action would be a negative factor.

22 Q Now, I'm just trying to get you to define it.

23 So that now your statement is that the specific
24 negative factors referred to in the question appearing on
25 page 6 would be non-conformance reports indicating non-

1 compliance in an area relating to specifically managerial
2 ability?

3 A I think you would note that it says, "including
4 non-conformance reports," rather than restricting to.

5 Q Well, now, I read specific to mean . . .

6 (Pause.)

7 Excuse me, Mr. Chairman.

8 (Pause.)

9 Let me go back once more. I'd like to get all of
10 the qualifications on the record, every qualification that
11 you can think of -- and I'm perfectly willing to hear them
12 all -- as to what you mean by a specific negative factor, as
13 used in this testimony.

14 Now, in order to expedite things I'll state once
15 again what I'm hearing. If it's incorrect, please correct me.

16 I'm hearing this that you define, in this context,
17 in the Shearon Harris case, in your business, the phrase
18 "specific negative factors", as appearing on page 6, to be
19 non-conformance reports indicating non-compliance relating
20 to -- that you consider to relate to managerial ability that
21 you consider are not resolvable.

22 And if that's not a correct understanding of what
23 you're defining specific negative factors, I'd like you to
24 correct me.

25 A Mr. Erwin, I'm not sure that your paraphrasing of

1 me back was completely accurate. Quite frankly, I would
2 have a hard time restating each time on this.

3 What we have tried to do -- and unfortunately, my
4 semantics and your semantics are not communicating, and I
5 recognize it --- is that our total --- and maybe to try to
6 attack it from a different point of view, our total inspection
7 program is designed to identify problems.

8 These problems in some cases may be management
9 related and reflect on management's ability.

10 Any matter that our inspector looks at, though
11 having a degree of reflection, positively or negatively, on
12 management or on the other aspects of the operation, the
13 context that we intended for this I believe can be fairly
14 stated as identifying the problems relating to management
15 that would fall within a non-compliance category.

16 We have described in the testimony, very briefly,
17 those areas in which we looked, including specific references
18 where we may pick up information to assist us in identifying
19 a problem and identifying its level.

20 MR. ERWIN: Mr. Chairman, I hate to take the
21 Board's time and my own time in repeating these questions, but
22 I don't believe that I have received an answer to any of my
23 last five questions.

24 I've been trying -- I've simply tried to understand
25 the testimony, and tried to get the witnesses to define what

wel 12

1 they meant in their own testimony, and to my mind I have
2 not received an adequate or even a straightforward answer
3 to any of the questions.

4 Every time I get another answer, it appears to
5 define the terms that I'm trying to get defined in a different
6 manner.

Madelon fjs

7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Madelon
lws WEL
cl4 mpbl

1 The reason I'm asking him this is because we had
2 a situation where Dr. Leeds asked someone in an earlier
3 hearing what evidence -- if he had any evidence, and the
4 word "evidence" admits something to him, and it admits
5 something a heck of a lot different than what it means to me.

6 I'd like to know what they mean when they say
7 "specific negative factors" on page 6 of their testimony,
8 and I don't have any answer to that.

9 MR. REIS: I think the witness has said several
10 times what specific negative factors is, and as you refer
11 to the material in the second paragraph of that answer it's
12 giving those negative factors, particularly as they refer to
13 management control.

14 CHAIRMAN SMITH: If you have a specific motion
15 to make, I wish indeed that the answer were simpler and
16 more easily understood. But as he points out, he just
17 simply is not susceptible to a real simple answer. And of
18 course the entire tenor of the testimony has been that many
19 of these answers simply depends on one's professional judg-
20 ment. And I think that this is the thread of his testimony
21 here too.

22 WITNESS MURPHY: I think that is a fair summary
23 of it, Mr. Chairman, that it is very difficult to give a
24 box definition of some of these terms.

25 CHAIRMAN SMITH: Have you done your best?

mpb2 1

WITNESS MURPHY: I've done my best.

2

CHAIRMAN SMITH: Well, I think, then, you can argue the point, Mr. Erwin. I don't really know how to help. If I did, I would.

3

4

5

MR. ERWIN: I'd like for the members of the panel to attempt to do their best to define what they meant by specific negative factor when they ascribed -- what they thought was meant when they ascribed their names to this testimony.

6

7

8

9

10

DR. LEEDS: Mr. Erwin, I've had a little problem with this because part of the answer was conditioned on as they affected management -- managerial ability, and I'm not sure we've pinned down what that means either, you see, because there was an exclusion. It did not apply to those things that did not affect managerial ability. So there's an exclusion there also.

11

12

13

14

15

16

17

WITNESS BROWNLEE: Dr. Leeds?

18

DR. LEEDS: Yes.

19

WITNESS BROWNLEE: Might I inject some points along what these different comments mean?

20

21

When we say in the second paragraph:

22

"Region II of I&E has reviewed CP&L's current overall construction QA/QC program and procedures...."

23

24

25

we mean exactly that. We have gone to the field and we have

mpb3 1 reviewed their detailed procedures for that work which is
2 in progress and have actually taken our professionals out
3 there and they've reviewed it to see if they're implement-
4 able.

5 And based on our reports we come back and our
6 reports are relatively clear that we find these -- I want
7 to use the term "adequate" -- until shown differently.

8 When we say that:

9 "...the corporate audits and the engineer-
10 ing and construction QA surveillance reports of
11 activities by CP&L engineering, the nuclear
12 steam system suppliers, the architect engineers..."

13 That is management control. These men have
14 established organizations within the overall organization
15 and function so that management gets what they're paying
16 for. And these men are going out and they're auditing and
17 we're checking these audits. We are looking to find the
18 deficiencies that they have uncovered.

19 They may be going to the AE. We have a
20 Region IV that is checking that same AE. And we compare
21 across this.

22 So when this type of material is presented in
23 this fashion without a lengthy explanation, I can't give you
24 any more. And if you don't understand the terminology here,
25 then this is management control and the system that he has

mpb4 1 put into place.

2 I don't know how to do it any other way.

3 DR. LEEDS: Okay.

4 Let's see if I understand you, then, Mr. Brownlee.

5 What you're saying is that these items discussed
6 above, the corporate audits, the construction program
7 procedures and so forth, is actually managed with control,
8 and that if those are okay in your view, if those are okay
9 in your view, then there is adequate management ability
10 demonstrated.

11 Is that a shorthand translation?

12 WITNESS BROWNLEE: Yes, sir. I've gone on the
13 record before --

14 DR. LEEDS: Okay.

15 WITNESS BROWNLEE: -- that we have reviewed those.

16 And what I put down here is -- I'll back it up if I have to.

17 And be it non-conformance or what they call
18 deficiency and disposition reports, these are two levels
19 of seriousness that they put into their system. And if
20 someone, you know, doesn't understand what they are, then
21 it's hard to understand, I agree.

22 MR. ERWIN: I think I understand what they are.

23 BY MR. ERWIN:

24 Q I'm asking you what you mean. You wrote the
25 testimony.

mpb5

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A (Witness McFarland) A negative factor. You see the word "non-conformance". That's a negative factor. When you see the word "deficiency" that's a negative factor.

Aren't these clear terms?

MR. ERWIN: Mr. Chairman, the panel is contradicting itself right and left here because Mr. Murphy just simply a few minutes ago stated that specific negative factor in the question did not refer simply to non-conformance reports and deficiency and disposition reports, but refers specifically to non-conformance reports that indicated non-compliance that was related to CP&L managerial ability and so forth.

WITNESS MURPHY: In those areas.--

MR. REIS: Mr. Chairman, I don't know where we're going with this. I think at this point the record speaks for itself.

If there are further questions to ask on this, they can be asked. But we're repeating ourselves and going over and going over again and again the same thing.

CHAIRMAN SMITH: I think that's correct.

I didn't see those two answers as being inconsistent. I think that --

BY MR. ERWIN:

Q Well, may I ask all members of the panel to be as forthcoming as -- I think, you know, at least the first

1 three have attempted to answer the question, and I think if
2 there are contradictions to the testimony they are on the
3 record.

4 I'd like for the last two members of the panel
5 to -- and I'll listen to their answers and make no comment
6 on them.

7 A (Witness Herdt) Well, I think the first thing
8 is who really writes the non-conformance reports and defici-
9 ency and disposition reports, and that is done by CP&L.
10 And that shows their management ability, besides all the
11 other records and the audits that they have done, the
12 management ability to construct this particular plant.

13 And I guess the word "positive" and "negative"
14 is there is a positive point that they have found these
15 things commensurate with the construction status at the
16 very beginning. And to me, there's no inconsistency in
17 what's being said here.

18 Q Mr. Bryant?

19 A (Witness Bryant) I find no problem with it as
20 stated.

21 Q By whom?

22 A As stated in the testimony. I would point this
23 out for definition of independent judgment. I cannot
24 really make it. I'm sure that I might give slightly
25 different words for different things than any other people.

mpb 7 1

Q Well, when you ascribed your name to this testimony, what did you understand the specific negative factor, as used on page 52, to mean?

A I consider this to be those things that our inspectors have found that were good, that met the requirements, and those things which they find which are questionable.

Obviously if a licensee has found and written a non-conformance report, he has found something that is not exactly right. The fact that he found it, and it was corrected, it was in the negative and it was in the positive.

CHAIRMAN SMITH: Mr. Erwin, I'm sympathetic toward your problem.

MR. ERWIN: I have no further -- I mean, I'm not going to beat the horse.

I apologize. I did not mean to take --

CHAIRMAN SMITH: No, I think that your questions have demonstrated what, as I mentioned before, is a thread that has run through the testimony of each of the panels. No matter how you try to come up with easily stated, easily listed objective standards, somewhere along the line, several times along the line it comes right away to a person who has to make a judgment, a professional judgment.

And I think you're establishing this by the difficulty you're having in a discrete answer to your question.

mpb8 1

Now you can argue the significance of that if you
2 want to.

3

MR. ERWIN: I won't at this point.

4

BY MR. ERWIN:

5

6

7

8

Q On page 7, the words on the second full answer,
the word "selective" and "representative" are used, and I'd
just like somebody to tell me who selected the examinations
and what the records are representative of.

9

10

There has been some testimony prior to this
about this matter, but I'd like to clarify it.

11

12

13

A (Witness McFarland) The experience level of the
inspectors is used here within our program. You understand,
we have a structured program of inspection.

14

15

16

17

18

19

20

Yesterday there was a discussion about the
potential use of random samples, et cetera. Here we use
the experience of the inspectors to select procedures and
records which are significant. Too often in random sampling
we come up with examples which were purchase orders of truck
tires or some other such insignificant thing not related to
safety.

21

22

23

24

If we go through a group of procedures, we would
look at the procedures which were being applied at the time
of excavation, say, or steel welding, or later on they will
be of ones with instrumentation.

25

And representative records, we look at

mpb9 1 representative records of Category 1 or safety-related
2 equipment.

3 Now it's been explained that we do a representa-
4 tive, any sampling, using these terms, we do not do a 100
5 percent inspection. So our experienced inspectors look at
6 what is appropriate at the time. If they have--in the case
7 of power wiring and safety-related equipment or electrical
8 panels, there may be as many as 20 panels; in each panel,
9 several hundred wires, and maybe 100 devices. We do not
10 look at 100 devices or 1000 wires. We look at several which
11 are representative of the equipment used for the safety-
12 related functions.

13 Q Is that a random sample or --

14 A No, that's what we just explained. We do not
15 use a random sample. We use the ones which are selected
16 by the experienced inspector to be representative of a
17 safety-related item.

end
6 Madelon

7 Madelon
flws

18
19
20

21

22

23

24

25

1 Q Could you quantify this in an instance or two?
2 How many are there? Just to give us some idea.

3 A Well, safety-related items would be like feedwater
4 pumps, and then the feedwater control valves.

5 Q How many out of the total?

6 A We have a number of these which are required by
7 our program and our inspectors review these specifically for
8 each discipline, and then in reviewing such things as the
9 previously mentioned non-conformance reports, the deficiency
10 and disposition reports, we often overlap into another number
11 of the same type of device. And these can occur at more than
12 one period in a construction program, recognizing the
13 construction program lasts . . .

14 A (Witness Murphy) Mr. Erwin, the numbers looked at
15 vary according to what's being looked at.

16 For example, we look at at least so many welds in
17 the primary system. We may look at more.

18 In addition, the inspector himself is free, and
19 in fact must expend on an average of 20 percent of his time --
20 not on each inspection, but total -- over a period of time
21 inspecting matters, items, within his area of interest.

22 In other words, it's an independent inspection.
23 He can choose it. That can increase these totals. This,
24 again, is an attempt to get a representative sample of the
25 total, without going to random sampling techniques.

wel 2

Q On page 14 of the testimony, the first full answer, you state:

"CP&L has maintained a common core of upper level management through the Robinson, Brunswick and Harris projects. CP&L has hired qualified and experienced personnel to manage construction and QA/QC activities, developed a documented QA program for control of QA activities . . ."

Now, the personnel that you're referring to are CP&L personnel, not the contractor's. Am I correct? In that context you're not referring to Daniel Construction Company?

A (Witness McFarland) That's correct. CP&L.

Q Are you in fact familiar with the experience and the qualifications of their contractors, Daniel, among others, and Research Cottrell?

A Routinely we review the requirements for these positions, which is on work that's safety-related, and the special order on ASME and SNTC, the quality control programs, reading of radiographs, and such things as that.

They have made available to us on numerous occasions the requirements of the job, and on some occasions even -- I believe I'm correct in saying the resumes of the personnel fulfilling the jobs.

Q I'm referring now to the independent contracts. Are you referring to them? I think your answer is directed

1 to --

2 A CP&L.

3 Q I don't mean to confuse you, because I started
4 off using the -- you know, asking you to clarify this
5 sentence on page 14, and then asking you to discuss their
6 contracts.

7 I'm sorry, I didn't mean to confuse you.

8 A Well, Daniels -- and I think that's who you're
9 talking about right now -- we've looked at Daniels not only
10 with regard to this particular site, Harris, but they've
11 also been the constructors for at least two other sites
12 within this region.

13 Q They've also been constructors outside this
14 region, have they not?

15 A That's true.

16 Q And have you looked at their projects outside the
17 region?

18 A I personally have not looked outside the region.
19 We've looked at two projects within this region, and they're
20 also doing a third -- another project, some supplemental work
21 at another site right now.

22 We've looked at them throughout this whole period
23 of time.

24 Q Are you aware of any problems that they have had
25 as to structures outside the region?

wel 4

1 A (Witness Murphy) Only through hearsay.

2 Q Well, aren't you aware of anything said about it
3 in this region other than hearsay?

4 A Sir, we have inspected their activities in this
5 region. We have not inspected -- we, Region II, have not
6 inspected their activities in other areas.

7 Q Now, when you say you, you have heard by hearsay,
8 you mean to say that there are no individuals presently in
9 Region II who have ever inspected a Daniels site outside of
10 Region II?

11 A We have on occasion loaned inspectors to other
12 regions. I believe we have had an inspector inspecting at
13 Wolf Creek, for example, assisting Region IV. -- I believe
14 Daniels may be there, I'm not positive.

15 Calloway, a facility that I know of that has
16 Daniels Construction people there, to my knowledge we have
17 not had an inspector inspect their activities.

18 Q Now, in what way would the information derived
19 from an inspector's oral comments to you in Region II differ
20 from an inspector's oral comments that you might have heard
21 out of Region II, say, about Calloway?

22 A Would you restate your question?

23 Q Well, you said it was hearsay. Is this --

24 A We have -- we read the papers, we have seen some
25 reports in the papers referencing construction at Calloway.

1 We have seen some information in morning reports
2 relating to Callaway.

3 I personally have not discussed with anyone
4 inspecting first-hand Callaway about their experiences at
5 Callaway.

6 I do not know whether anyone in Region II has or
7 has not questioned people in this area.

8 But actually without going into a legal definition
9 of hearsay, mine was that it was unsupported type of informa-
10 tion.

11 Q Unsupported by whom? In other words, you -- you
12 used the word.

13 MR. REIS: I object to this line of questioning,
14 in that a question of hearsay or what is hearsay or what is
15 not, or what goes on someplace else is not material to the
16 management capability of CP&L and its contractor at the
17 Shearon Harris facility, which I think we're dealing with
18 right now, to construct that plant.

19 Now, if there are questions that go to the
20 management capability of CP&L or its contractor, I could see
21 that. But we're getting into an argument on issues that are
22 not germane to the inquiries of this Board.

23 MR. ERWIN: Mr. Chairman, the question was asked
24 whether the testimony of the witnesses is that CP&L is hiring
25 qualified and experienced personnel. I asked whether they

wel 6

1 were aware -- I believe -- whether they were aware of their
2 qualifications and experience, and they stated that they were.
3 And on the basis of two other projects, I believe, within
4 the Region. And I asked them whether they were familiar with
5 any other projects that they were basing their statement
6 that they were qualified and experienced upon their inspections
7 within the Region. And I asked them if they were aware of
8 any other areas, and if they were aware of any other problems.

9 And we've heard their answers.

10 I think it's directly relevant. If their
11 statements or conclusions that Daniel and Research Cottrell
12 are qualified and experienced is based on the inspections
13 in Region II, or elsewhere, I certainly think I could ask
14 them whether or not they're familiar with any other operations
15 of those contractors, and if they answer by saying only by
16 hearsay, I think I have a right to pursue that somewhat.

17 CHAIRMAN SMITH: Somewhat.

18 MR. ERWIN: That's right.

19 CHAIRMAN SMITH: You were going to comment, Mr. ..
20 somebody was going to comment?

21 WITNESS MURPHY: Actually, I had a comment, sir,
22 or a question. The answer here was relative to CP&L and
23 their own forces who would be managing the construction and
24 QA/QC activities at Harris.

25 I believe that CP&L has those activities under

wel 7

1

their own control and have not contracted that work out.

WRB fls 2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

2e WPSchl

1 The line of questioning proceeding about the
2 Daniels Depot, we will review the qualifications of those
3 people employed by Daniels working at Harris, any qualifica-
4 tion requirements that are applicable to them without regard
5 to whether -- what the activities have been at any facility
6 inside or outside of Region II.

7 BY MR. ERWIN:

8 Q Based on your examination or based on your in-
9 spections of Daniels in Region II, do you believe Daniels
10 to be qualified and experienced?

11 A (Witness Murphy) I personally have no reason to
12 believe that they are not qualified and experienced, but
13 recognizing that the work forces in a particular company
14 change with time, our inspections will be based on those
15 activities at Harris, not at other facilities.

16 CHAIRMAN SMITH: Do you have, for example, a
17 constructor serving in one plant under the direction of one
18 utility perform -- the same constructor performing on another
19 plant under the direction of another utility?

20 WITNESS MURPHY: I think we can research the
21 records and come up with such examples, sir, but it would be
22 very tedious.

23 WITNESS MC FARLAND: The management of the various
24 constructors is completely dependant upon the desires of
25 the utility company for such things as money flow and the

eb2

1 timing and the manpower, the contract terms; in many ways.

2 It's doubtful if it could be fruitful if we did
3 such a review. We've had this asked several times.

4 CHAIRMAN SMITH: So I don't think it's going to
5 help you to go very far along this line.

6 MR. ERWIN: It may very well be what they say
7 but I would like them to say it for the record.

8 WITNESS MURPHY: We have two utilities within
9 Region II who work force account; that is, they do all of
10 their own construction work. We see variations in the dif-
11 ferent facilities in each of these two companies. So here
12 the same company owns the facility, is doing the construction
13 at the facilities. At one facility their performance may be
14 at one level and at another facility, the performance is at
15 another level. We have two such utilities in this region
16 and we see those differences.

17 CHAIRMAN SMITH: Do those factors have a greater
18 effect upon the quality of the product than the factors
19 referred to in Mr. Erwin's questioning, that is, the general
20 reputation of the constructor?

21 WITNESS MURPHY: Sir, will you repeat that?

22 CHAIRMAN SMITH: What you just described, the
23 control of the utility over the constructor and the factors
24 that are site specific and project specific, do they have a
25 more important effect than the general over-all reputation

eb3

1 and competence of the constructor?

2 WITNESS MURPHY: My answer to that would be I
3 believe that to be true.

4 WITNESS MC FARLAND: But our basic problem is such
5 that we are available-- We are sure that they meet the
6 "adequate" requirement. That's why we use the word "ade-
7 quate." And even that word is semantics. One could use
8 several words. But if it meets 100 percent of the require-
9 ments, whether they are 101 or 121--

10 CHAIRMAN SMITH: You don't make any inspection
11 judgments based upon the reputation of Daniels in Missouri?

12 WITNESS MURPHY: No, sir, that is correct.

13 BY MR. ERWIN:

14 Q Would you make any inspections if it should appear
15 to you that a constructor on a particular plant had made a --
16 had let's say made a particular mistake someplace else and
17 it makes sense to you to make an inspection for that mistake
18 at another site?

19 A (Witness Murphy) Let me give you an example that
20 I think might speak to it.

21 We have been aware of a contractor's person who
22 has gone from one site to another site. And where we felt
23 that he might not be performing as fully as we would like to
24 see at the first site, or had heard that he had not, we would
25 be very watchful without making it anything formal, to observe

ab4

1 the performance of that person at the second site.

2 Now in that the person may be working for the
3 same contractor at both of the sites, to that my answer would
4 be Yes.

5 Q Thank you.

6 CHAIRMAN SMITH: Could this be said? You'll use
7 any information that comes to you --

8 WITNESS MURPHY: Yes, sir.

9 CHAIRMAN SMITH: -- but you don't depend upon
10 random information popping into your offices?

11 WITNESS MURPHY: That's correct, sir. We have
12 a constant flow of information from one region to the other
13 and from headquarters to the regions and vice versa, and we
14 do make use of that information.

15 MR. MC FARLAND: That's why we like to use the
16 words "representative" and "selected." That fits in with the
17 experience of the inspectors.

18 BY MR. ERWIN:

19 Q Now again on this same page you say "a common
20 core of upper-level management through the Robison,
21 Brunswick and Harris projects." When you say "common core
22 of upper level management," the Robinson project began in
23 what? 1968? And went through, and we're in Harris. Who
24 constitutes the common core of the P&L upper-level manage-
25 ment that has been there since 1969?

eb5

1 A (Witness Murphy) I think in this room there are
2 many of the individuals that would meet the identification
3 that we give here. There were people at or associated with
4 the Robinson plant that are still within the company, with
5 the Brunswick plant that are still within the company, and
6 that were in corporate headquarters and that are still within
7 the company.

8 In the context of this, we are actually making
9 reference on the construction side and our experience with
10 them on the construction side.

11 Q But there have been-- You're not saying when
12 you state this that the same people -- that CP&L has maintained
13 the same upper-level management on the construction side from
14 1968 to --

15 A No, sir.

16 Q I didn't assume you were but I just wanted to
17 have that clarified.

18 Do you know how many changes have been made?

19 A No, sir. There would be a multitude. We are
20 aware of very many, and there would be very many that we are
21 not readily aware of.

22 CHAIRMAN SMITH: Mr. Murphy, you've been handling
23 a lot of questions for two days. I was hoping that we could
24 continue on until late afternoon today because this is taking
25 longer than we want. But you're getting tired.

ab6

1 WITNESS MURPHY: Sir, I, for one, would be glad
2 to see a continuation in the hopes of completing the hearing
3 as soon as possible, and I think that I am still good for
4 going for some length of time. I probably will start
5 shuffling off some of the questions to others, more so than
6 I have done, which may be of benefit.

7 MR. ERWIN: Mr. Chairman, may I ask how long you
8 intend to run?

9 CHAIRMAN SMITH: 5:30. How does that suit the
10 parties? We have to be out of here by 6:00.

11 MR. ERWIN: We have been here much later than that
12 on occasion. We didn't know whether you--

13 CHAIRMAN SMITH: It seems later than that.

14 MR. ERWIN: We've been here as late as ten o'clock
15 on occasion, I think; 9:30 once.

16 DR. LEEDS: That's before they invoked the
17 Cinderella rule.

18 MR. ERWIN: That's right. And I didn't know whether
19 I should -- whether that was likely to be the case.

20 BY MR. ERWIN:

21 Q On page 20 of the testimony you state, again in
22 reference to the technical staff members' comments that were
23 circulated in the October 3rd memo from you that there were no
24 adverse comments.

25 Now again the Chairman has said that the reason

eb7

1 for that categorization, you don't mean to say by there being
2 no adverse comments that there were no criticisms of CP&L
3 at all that were contained in this document?

4 A (Witness Murphy) Sir, you now have copies of
5 those documents, and I believe that you can better read the
6 documents yourself and see them.

7 There were no comments in those documents that
8 I would construe to be adverse in the respect of CP&L's
9 ability to manage the construction of the Harris facility.

10 CHAIRMAN SMITH: Mr. Erwin, when I made that
11 comment I was operating under the assumption that you hadn't
12 had a chance to read those yet.

13 MR. ERWIN: I've read them.

14 CHAIRMAN SMITH: I thought it might have been
15 helpful.

16 MR. ERWIN: We received them prior and are
17 aware of them now.

18 BY MR. ERWIN:

19 Q Rather than go through them one by one, would you
20 not agree with my characterization that in more cases than
21 not, in many more cases than not, the individuals who res-
22 ponded to your questionnaire said they had no opinion as to
23 CP&L's capability to construct and maintain and operate
24 Harris, and that in many cases they said that they had no
25 evidence, including their professional judgment, reflecting

eb8

1 favorably or adversely on the capability of CP&L management?

2 A (Witness Murphy) There are two aspects to this.
3 Number one is that many of the people, as evident from the
4 questionnaire, have not been to the CP&L facilities. Most of
5 the branch actually were not members of the branch during the
6 construction of Brunswick, the last facility. And in fact
7 almost 50 percent of my staff were hired this past -- oh,
8 approximately year or year and a half.

9 Now if they had any comments, any knowledge from
10 whatever source that would indicate that CP&L could not
11 manage the construction of the facilities, I would have hoped
12 from the tone of the memo that they would have provided that
13 information.

14 Q But the answer to my question is, is it not, is
15 that a large number of the individuals who have in fact
16 inspected CP&L construction sites had formed no opinion and
17 gave no opinion as to the capability?

18 A I took that "No opinion" to mean that they did not
19 have an adverse comment.

20 CHAIRMAN SMITH: I don't think the question is
21 coming through. Why don't you restate your question? It's
22 a simple matter of arithmetic.

23 BY MR. ERWIN:

24 Q Isn't it true that a large number of -- and again
25 I can only go through these, but a large number of individuals

2e 2f

sb9

1 who were asked to respond to this memo, who did in fact -- who
2 have in fact inspected who answered question 1 and question
3 2, for instance,-- Well, his answer to question 1 would be
4 Yes, his answer to question 5 No, none, formed no opinion
5 whatsoever.

6 A (Witness Murphy) I believe that you would be
7 correct. I made no attempt to determine a breakdown of that
8 nature.

9 Q Now you stated that you took a statement that
10 they did not have any opinion as to CP&L's capability to
11 construct and operate Harris as indicative of their not having
12 any adverse comments. Is that right?

13 A Not having an adverse opinion, yes."

14 Q Couldn't you take it just as well to mean that
15 they don't have a positive opinion?

16 A You could also take that, but I did not make
17 reference to positive comments.

18 Q Well, your question, question number 5 is, "Have
19 you formed an opinion?" It doesn't say positive or negative;
20 it says have you formed an opinion concerning CP&L's capa-
21 bility to construct and operate Harris. And if so, what is
22 your opinion?

23 And time after time after time it is "No," "None,"
24 "I have formed no opinion." Now it doesn't say "I have formed
25 no negative opinion." It says, "I have formed no opinion."

ab10 1 Isn't that right?

2 MR. REIS: Mr. Chairman, I object. Counsel is
3 just arguing with the witness. I think the witness answered
4 the question before, and I think his answer was complete.
5 He said that that was so, that those answers were given,
6 That's what he said.

7 WITNESS MURPHY: Mr. Chairman, I have one of the
8 inspectors that received the questionnaire sitting next to
9 me, in fact two of them, and maybe they can enlighten us.

10 CHAIRMAN SMITH: I don't think that line of
11 questions is going to take Mr. Erwin very far. I think he
12 can give him an answer.

13 WITNESS MURPHY: Will you restate the question
14 and I will give it to you to the best of my ability.

15 BY MR. ERWIN:

16 Q In amplifying your testimony you said that you
17 believed -- that you took a "No opinion" answer to number 5,
18 to question number 5, to mean no negative opinion. And I
19 asked you whether you couldn't take it to mean no positive
20 opinion. And you said Well, it wasn't stated that way. I was
21 looking for negative opinions.

22 And I asked again whether or not question 5 was
23 not stated, "Have you formed any opinion?" And I'm asking you
24 once again whether or not the answers to question 5 can be
25 read....

ab11

1 To make a jump to where I would like you to get,
2 why do you say that no comment answers to question 5 indi-
3 cate no adverse comments rather than indicating no opinion
4 whatsoever?

5 A (Witness Murphy) The members of my branch were
6 very much aware that we were actively seeking any adverse
7 comment that they would make.

8 CHAIRMAN SMITH: That was the purpose of the --

9 WITNESS MURPHY: This was the purpose of the
10 survey.

11 CHAIRMAN SMITH: You were not trying to determine
12 by acclamation of your staff?

13 WITNESS MURPHY: MR. Chairman, we first went with
14 a verbal survey of the people within the branch. There were
15 no -- I will use the term "adverse comments."

16 We asked them did they specifically know of any-
17 thing that we should bring before the Board that would re-
18 flect on the applicant's abilities.

19 The second thought was to give this some for-
20 mality by trying to issue a document to the people that they
21 could respond to to have their comments in writing so that
22 rather than we go in with anything -- a position that could
23 not be supported that we could come in with a position that
24 was supported.

25 MR. ERWIN: I understand all of this. Perhaps I

ab12

1 can get to my point more easily by asking:

2 BY MR. ERWIN:

3 Q What do you take "No comment" or no answer to
4 number 3 to mean? There you have no question about it because
5 if the answer to 1 is Yes, "Do you have any evidence, in-
6 cluding your professional judgment, that would reflect favor-
7 ably or adversely...." "that would reflect favorably or
8 adversely on the capability of CPSL management to construct
9 or, in the future, operate Harris?"

10 Now in order to jump over and go down to the
11 hearing I think you would agree, would you not, that there
12 are a number of responses where the answer to question 1 is
13 Yes, and the answer to 3 is "No," "None," "No comment."

14 A (Witness Murphy) Once we received these question-
15 naires, Mr. Erwin, we did not question the people whatsoever
16 as to their bases for either answering or not answering the
17 question.

18 CHAIRMAN SMITH: That wasn't the question.

19 BY MR. ERWIN:

20 Q I'm asking you what you understand.

21 A (Witness Murphy) "No comment" or "No"--

22 Q You told me what you understand the "No" answer
23 to 5 is. What do you understand the "No" answer to 3 to mean?

24 A I did not form an opinion as to that part of
25 the questionnaire where there was no answer to--

eb13 1 Q Well, you just told me that you formed an opinion
2 on number 4 when they said "No."

3 A Please restate the question because I'm getting
4 totally confused.

5 Q I'm getting confused, too.

6 I'm trying-- You have stated under oath that
7 you took a "No" answer -- that when somebody answered 1,
8 "Yes," they had inspected or investigated CP&L corporate
9 offices, or Robinson, Brunswick or Harris, and then they pro-
10 ceeded to answer the rest of the memo and answered 5, "No
11 comment," "No," "No opinion," "Haven't formed any opinion,"
12 "None," you took that to mean that they had no adverse com-
13 ment. All right, I'm willing to accept that as your under-
14 standing of that.

15 Now I'm asking what's your understanding of a
16 similar response to number 3 is, which is very specifically --
17 and you amplified. And to go back, you amplified your answer
18 by saying you were looking for negative comments.

19 Now you ask in number 3, if the answer to 1,
20 "Have you performed a CP&L inspection or investigation,
21 do you have any evidence, including your professional judg-
22 ment...." what we've been talking about all afternoon --
23 "....that would reflect favorably or adversely on the capa-
24 bility of CP&L management to construct or, in the future,
25 operate Harris?"

eb14

1 That's one question.

2 "If the answer is Yes, please describe."

3 Now again, in order to get over the process so
4 we don't have to go through these one by one, won't you
5 accept there are a number of people who answered 1 "Yes"
6 and number 3 "No," "None," "No comment?"

7 A If the person answered -- failed to put down an
8 answer, as one did right here, if he put in "No comment,"
9 I took this to mean that he had no opinion and particularly
10 none that was adverse.

11 Q But it states:

12 "Do you have any evidence --"

13 CHAIRMAN SMITH: Mr. Murphy, I think that he's
14 simply trying to get you to admit that when a person answers
15 "No" to number 3 he is also saying "No" to the fact that he
16 has no evidence that reflects favorably.

17 WITNESS MURPHY: Yes, Mr. Chairman, I'm aware --

18 CHAIRMAN SMITH: Isn't that your point?

19 MR. ERWIN: Yes, Mr. Chairman, that's exactly my
20 point and if I could ever get an answer I would go home in
21 peace.

22 WITNESS MURPHY: Remember, Mr. Erwin and
23 Mr. Chairman, the inspectors and we in management are very
24 sensitive to anything that might indicate that any pressure
25 was being applied to anyone.

eb15

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

CHAIRMAN SMITH: You can explain all this, but I think you can simply answer that question, however, then explain.

WITNESS MURPHY: It could mean that he did have -- that he had no information that reflected favorably, yes.

281

2F2 wb
IRB/wbl

1 BY MR. ERWIN:

2 Q May I ask you: Do you mean that it could also mean
3 that he did have some -- that if the answer is no, it could
4 also mean that he did have some evidence?

5 You said "could." You used the word "could."

6 Do you mean to say by that answer that it is
7 possible for a person answering No. 3 "No," to actually have
8 evidence that would reflect favorably on the capabilities
9 of CP&L management? If that's so, then I would like all of
10 this stricken.

11 MR. REIS: I don't understand the question,
12 Mr. Chairman. I don't understand the pending question.

13 CHAIRMAN SMITH: There is no question. The
14 question is chaotic. But the basic problem we have here,
15 Mr. Erwin, is that the answers will speak for themselves.

16 He concedes that a "No" answer to No. 3 is a
17 "No" answer. He doesn't even have to concede it. The
18 question is there and he answers it. So you can argue any
19 way you want to, and persuasively, that a "No" answer to
20 3 is a "No" answer to 3 in all of its components.

21 But I'm not going to let you push him.

22 MR. ERWIN: I won't say another word.

23 CHAIRMAN SMITH: --on this point. Because
24 quite clearly to me, what Mr. Murphy was doing is that he
25 was circulating to the Staff and making sure that anybody who

wb2 1 had any unfavorable information brought it to our attention.
2 He was not beating the bushes for favorable information.
3 And they are not offering this, as I see it, the response
4 to this, as affirmative support for their position. It's lack
5 of negative.

6 MR. ERWIN: They are offering it for lack of
7 negative. And I'm saying the response to No. 3, in light
8 of their comments and their conclusions, I'm entitled to
9 cross-examination because I think every one of these is
10 absolutely incredible.

11 MR. REIS: Mr. Chairman, this is an argument to
12 be made in briefs and findings, and I don't think it's an
13 argument to engage in with the witness.

14 MR. ERWIN: I'm trying to establish how credible
15 or incredible these comments are. And Mr Murphy is the man
16 who circulated the memo.

17 CHAIRMAN SMITH: Part of the problem-- Mr. Brownlee,
18 do you have anything to explain that would help us?

19 WITNESS BROWNLEE: Yes, sir, I believe I do.

20 CHAIRMAN SMITH: All right.

21 WITNESS BROWNLEE: Prior to me filling out that
22 form-- And I hope he has one of those forms. I don't know
23 what I said on No. 3. But I did stand forth twice in a
24 hallway, and on the one on the verbal that he wanted a
25 response back, and apparently we got very little response back

wb3

1 from that, and then the second time. I knew what that form
2 was after. There's no doubt in my military mind what that
3 was after.

4 CHAIRMAN SMITH: The problem is not what the
5 author intended it to be--

6 WITNESS BROWNLEE: It was for the adverse aspects
7 on this issue.

8 CHAIRMAN SMITH: That's what I'm not going to
9 allow to go too far. But the problem raised by Mr. Erwin is
10 somewhat different. It's not what you intended by the memo,
11 it's what reaction was imparted in the minds of the people
12 who responded. And I think that he can make his point.

13 But let's go one step further. What affirmative
14 recommendation do you have to make, Mr. Erwin, about the
15 observation that you have made?

16 MR. ERWIN: I would simply state that the "No
17 adverse comments" statement appearing on page 20 of the
18 testimony, and the offer of this to show anything, seems to
19 have very little basis whatsoever. It's apparent to me that
20 what Mr. Brownlee has stated, what Mr. Murphy has stated,
21 is exactly the case, that everybody knew what this was about.
22 And they didn't even bother to read it, apparently most of
23 them didn't bother to read it, because if they did, if the
24 line inspectors at Shearon Harris had no favorable comments
25 to make about CP&L, if they had no favorable comments to make,

wb4

1 then how can management make a favorable comment in the
2 hearing? There are virtually no favorable comments in this.
3 I can't remember any. And that's what was asked for.

4 DR. LEEDS: Mr. Erwin, let me make sure I under-
5 stand you.

6 What you're saying is, there was no information
7 that came back, one way or the other, to Question No. 3?

8 MR. ERWIN: I'm saying that it was a perfunctory,
9 futile exercise and it's meaning is virtually -- I can't see
10 how.... Here, for instance, is Mr. Brownlee's memorandum,
11 at least I assume it is, it's initialled VCB, or is that
12 VLB?

13 WITNESS BROWNLEE: VLB.

14 MR. ERWIN: I assume that's Virgil Brownlee.
15 And it's clear, you know, by the handwriting, that in fact
16 he probably did dash it off.

WRB cass. f19

18

19

20

21

22

23

24

25

ass.
RB/wbl

1 MR. REIS: This is an argument for the briefs.

2 Let me say I believe, and everything I've heard
3 Mr. Erwin say is pure sophistry. It cannot be characterized
4 as anything else but that.

5 I says no adverse comments, and there is no
6 adverse comment. It doesn't say that there were no positive
7 comments or there were positive comments; it says no adverse
8 comments. And that's just what this contains. And I think
9 this whole thing is going nowhere. And I ask the Board to
10 cut off this line of questioning.

11 I think this is sophistry.

12 CHAIRMAN SMITH: Certainly the response by
13 Mr. Murphy that there were no adverse comments, at the very
14 least is a rational statement. Now you disagree with that.

15 But there is a more practical matter. How
16 do these responses affect your position in the case?

17 MR. ERWIN: Well, Mr. Chairman, I didn't offer
18 the responses. I mean, they don't really affect our position
19 in any way. I mean, I don't think they affect much of any-
20 thing. And that's what I'm saying. But they are put forward
21 as if they do affect something.

22 CHAIRMAN SMITH: I think you've put your finger
23 on why we're debating something here that doesn't require any
24 debating. These responses are not probative evidence that I
25 think this Board can make an important finding on. The only

WRB/mpbl 1
flws
wbl 2

3 thing that they do is that they assure the Board and the
4 record that those people who might harbor information which
5 have relevance on the issues on remand are made aware that
6 we are having a hearing, what the issues are, and if they
7 have anything that is going to be of significance to us, here
8 is their chance to come forward with it and bring it to our
9 attention.

10 But as far as probative, reliable, substantive
11 evidence, the responses are not that. Those people -- Dr.
12 Leeds points out that the question there may be deficient
13 in that there's a class of people excluded from subsequent
14 answers by number one. That is, you begin with a threshold
15 and you have to perform an inspection or an investigation
16 of CP&L corporate offices, Robinson, Brunswick, or Harris
17 before you can give this information.

18 However, this questionnaire was appended to
19 Panel 2's testimony on December 1st. And if you had any
20 problems with the format of it, that would have been the
21 time to --

22 MR. ERWIN: I don't have any problems with the
23 format of it. I'm simply trying to establish how credible
24 it is. And I think that's the purpose of cross-examination.

25 It was appended to their testimony, and I'm
asking for the right to cross-examine, and I'm asking for
them to answer my questions.

RB/mpb2

1 DR. LEEDS: I do want to make the point about the
2 questionnaire.

3 I don't want my comment that the Chairman brought
4 up.... There's a catch-all question number three -- number
5 four, which would have led, I think, almost anybody to have
6 then put themselves in the position of answering.

7 Number four says:

8 "Please discuss any matters not
9 encompassed by the above questions."

10 And so I would have thought that would have
11 caught everybody. But there is an exclusion, if you focus
12 down on strictly question number three. You can't read
13 that in isolation from question number four. That's my
14 problem here.

15 WITNESS MURPHY: Sir, this questionnaire was an
16 attempt to actually catch everything and provide for all
17 possibilities, contentions and certainly within the
18 time frame that we were having to work at that time, it got
19 very rapid review. And possibly there may be some deficien-
20 cies in the format side.

21 And as a "for example", as Dr. Leeds points out,
22 number one may exclude -- people may think -- people who
23 said no to number one may have excluded answering number
24 four. I hope they would not have.

25 CHAIRMAN SMITH: Okay. Let's go on; unless you

mpb3

1 have affirmative relief you are requesting, let's go on to
2 another subject.

3 MR. ERWIN: I would like to enter an exception
4 in the record.

5 Is that in the form of an order or a request?

6 I would like the opportunity to continue cross-
7 examination of these witnesses on this matter since it has
8 been proffered as testimony of probative value.

9 If you should clarify the point by stating that
10 in the Chair's opinion this should be excluded or it should
11 exclude this testimony or exclude this attachment as testi-
12 mony, then I will immediately drop it.

13 CHAIRMAN SMITH: One of the difficulties in
14 this proceeding, even though it's an adjudicative proceeding
15 under the Administrative Procedure Act, because the questions
16 involved pertain to public health and safety, the record
17 has to go beyond simply evidence and parties and adversaries.
18 And particularly in this case the record must demonstrate
19 that the means -- the mechanism was in place which would
20 bring into the public record information -- all information
21 that could be relevant. That is the only value of those
22 responses.

23 But let's move on to the next; attached to Panel
24 3 are responses, several of which are quite negative. And
25 I would expect that you would have no hesitancy to cite

mpb4

1 those in your proposed findings. I'm sure you'll find those
2 as being reliable.

3 MR. ERWIN: I will state for the record, Mr.
4 Chairman, right at this time that we have no intention
5 whatsoever of using any of those statements in any proposed
6 findings.

7 CHAIRMAN SMITH: The attachments to Panel 3?

8 MR. ERWIN: We have no intention whatsoever.

9 CHAIRMAN SMITH: Okay.

10 Then there's one other final problem. You are
11 a party to the proceeding. However, this is a proceeding
12 which is unique and in which the Board has its own interest.
13 And we were instrumental in having the matter remanded. And
14 we simply are departing from you in this direction.

15 We have our own responsibilities.

16 MR. ERWIN: That is fine.

17 I would like to enter the objection and excep-
18 tion.

19 CHAIRMAN SMITH: Make your objection and
20 exception with respect to the specific relief you want. I
21 still to this moment do not know what you want this Board to
22 do.

23 MR. ERWIN: Mr. Chairman, I have previously
24 stated that I will withdraw any objection or exception and --
25 will withdraw any objection and exception and will not

mpb5

1 pursue any line of cross-examination in regard to this
2 attachment if the Board should find at this time that the
3 attachment to the testimony will not be received as substan-
4 tial probative evidence.

5 Now I believe that's a clear statement of my
6 position. And I believe that -- since it has been proffered
7 as evidence, I have the right to cross-examination.

8 CHAIRMAN SMITH: I think that you are probably
9 in a good position there. You have a right to object to
10 having those responses received into evidence as proof of
11 the statements contained therein. But they will be received
12 into evidence for the limited purpose of demonstrating that
13 those persons did receive those communications and they did
14 come back with those answers.

15 MR. ERWIN: Thank you very much.

16 CHAIRMAN SMITH: That may be a distinction
17 which evaporates in proposed findings.

18 MR. ERWIN: Mr. Chairman, tell me if I am mis-
19 understanding you, because I would understand your ruling
20 to mean that no one in this proceeding could make a state-
21 ment in proposed findings to the effect that all technical
22 staff members of the Reactor Construction and Engineering
23 Support Branch responded and there were no adverse comments.
24 That's what I understand. That statement simply could not
25 be made in a proposed finding under my understanding of your

mpb6

1 ruling, because that's what I would like to see happen.

2 CHAIRMAN SMITH: Mr. Reis, what would be your
3 position?

4 MR. REIS: My position is that the statements
5 set forth in the testimony are the statements set forth in
6 the testimony. There are no adverse comments.

7 Now if he makes a finding there were no positive
8 comments, I guess the Board could say there were no adverse
9 and no positive comments. That would not bother me.

10 But I think it is plain and simple that there
11 were no adverse comments. And I think that's support for it.

12 CHAIRMAN SMITH: I'm going to allow you to
13 continue the cross-examination. I'm going to reverse my
14 previous ruling.

15 BY MR. ERWIN:

16 Q I think most of us have read the responses, but
17 in order to put my question in context, I'd like to go
18 through a few of them and cite -- and again I will not
19 discuss any in which the respondents stated that they had
20 not inspected or investigated any CP&L plant.

21 The first one in my attachment that comes back
22 is -- appears to be from John R. Harris. And apparently
23 what appears to have....

24 Now, is he in construction or in operation?

25 A (Witness Murphy) He's in construction. He had

mpb7 1

inadvertently filled out the other form. And we have attached
a corrected one.

end WRB 3

Madelon 4

lws 4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Madelon 1
lws WRB
(Cass 12) 2
c9 mpbl
3

Q It's got "Murphy" on the top, and I figured
you knew what he was doing. But he's someone who should have
responded to your --

4 A He did.

5 Q -- to the Murphy, not to the Long questioning.
6 Okay.

7 And his statement is yes. His answers to one
8 and two are yes. His answer again to three is no. No answer
9 to four. And five, no answer.

10 Have you discussed --

11 DR. LEEDS: He said no answer to three and no
12 answer to five, and there was --

13 MR. ERWIN: His answer to three is no, his
14 answer to five is no, his answer to four -- there is no
15 answer to four.

16 BY MR. ERWIN:

17 Q Now have you discussed this question with Mr.
18 Harris?

19 A (Witness Murphy) No, sir.

20 Q Now the next one is Mr. Cogden, is that correct?

21 A That's correct, sir.

22 Q And the first, again, he answers yes to one and
23 two, and answers none to three and four, and answers no
24 opinion to five, is that correct?

25 A That's correct.

mpb2

1

Q Now, have you discussed Mr. Cogden's question with him?

2

3

A No.

4

I might be able to save time, sir, by saying I have not discussed any of these questionnaires with any of the gentlemen after they were completed.

5

6

7

Q All right.

8

Did you discuss the questionnaires with any of the gentlemen before they were completed?

9

10

A The questionnaires were given to the gentlemen

11

ahead of time. The gentlemen were told the purpose of the questionnaire was to try to determine if any of them had any information that would be useful to the Board in this hearing, and that we were specifically looking for negative comments.

12

13

14

15

Q I'm looking for one particular response, and I believe it to be a Murphy questionnaire.

16

17

(Pause.)

18

In order to save time, Mr. Murphy, do you recollect the -- a response to your questionnaire in which the respondent stated that he -- to paraphrase the statement appearing at the second page of your memo about appearing before the Board if he desires, and he stated that he did not desire to appear before the Board?

19

20

21

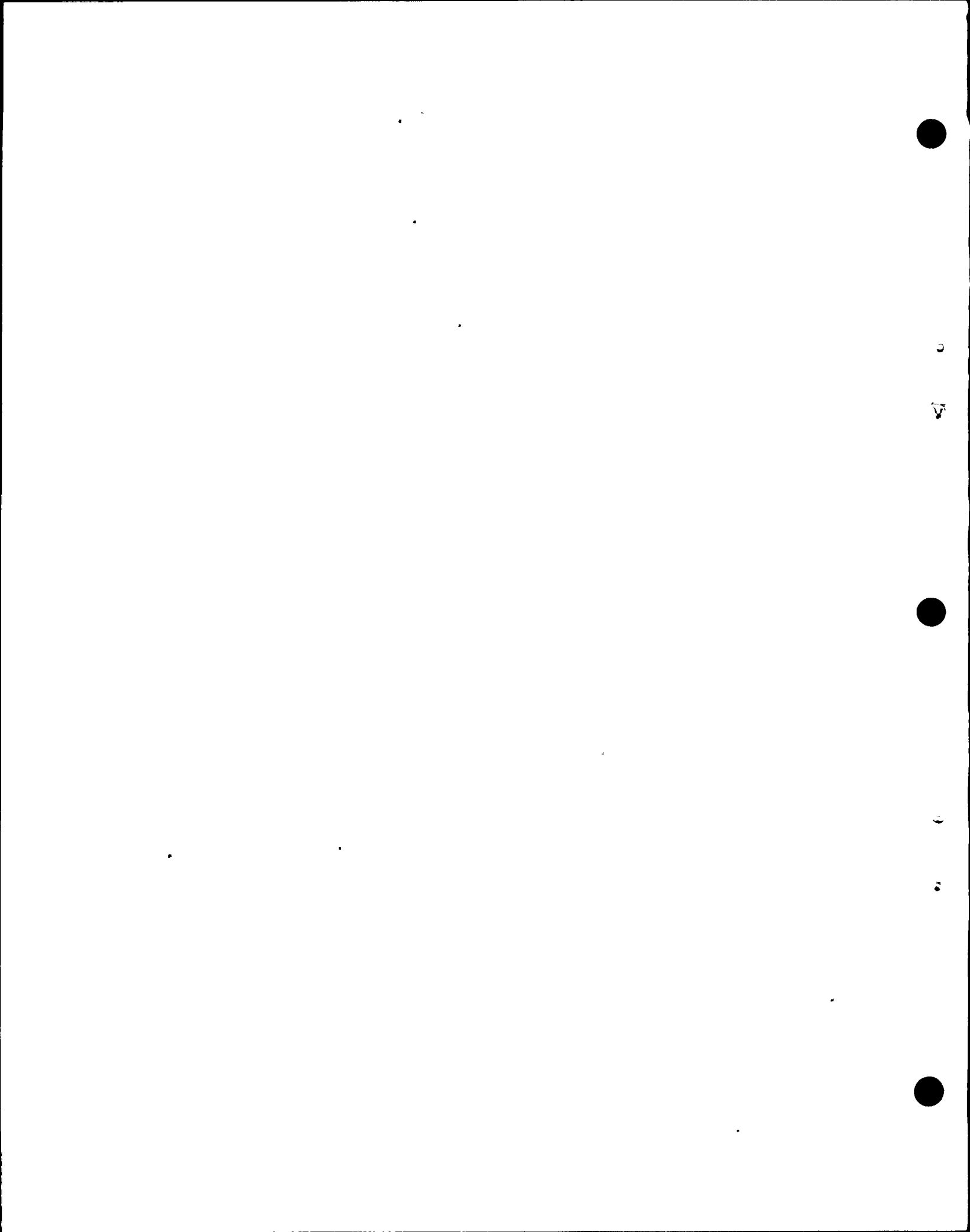
22

23

24

A I recall that there is one such that indicated that he did not care to appear before the Board.

25



mpb3 1

Q All right.

2

Do you happen to know which one it is?

3

A No, sir, I do not remember.

4

Q I don't remember, so I'm looking for it.

5

Did you discuss with any or all of the individuals

6

who answered this questionnaire whether they wished to

7

appear before the Board?

8

A I think that it was fairly common knowledge in

9

the office that anyone that wished to appear before the Board

10

in this hearing could do so.

11

Q Now I'll ask you to refer to the response of

12

Mr. -- is it W. B. Suttan?

13

A Swann, possibly.

14

Q Swann.

15

A Yes.

16

Q Now, the last two sentences of his response read

17

-- how would they read to you? His handwriting isn't clear.

18

DR. LEEDS: Where are you?

19

WITNESS MURPHY: There are four sheets that are

20

not numbered, and I believe it would be toward the last of

21

your package.

22

Now would you restate your question, Mr. Erwin?

23

BY MR. ERWIN:

24

Q What are the last two sentences of his response?

25

A (Witness Murphy) The last two sentences of his

mpb4 1

response:

2

"I do not wish to testify. My findings

3

and opinions are reflected in the answers to

4

the many questions submitted by Mr. Brownlee

5

to you."

6

I believe that he in this case is referring to

7

the questions that are a part of this testimony what were

8

provided with answers by Mr. Brownlee to me.

9

Q Now, what was his response to question number

10

four?

11

A Number four says:

12

"The facilities, salaries, and job

13

titles offered CP&L applicants appears to

14

hamper their hiring. This can delay but

15

not necessarily reduce the quality of con-

16

struction."

17

Q And what is that response to number five?

18

A "My opinion is that they can construct

19

Harris eventually. I have no basis for a

20

sound opinion on their operating capability

21

five to ten years from now."

22

Q Is that five to twelve years?

23

A Five to twelve, I'm sorry.

24

Q And you do not consider -- does any member of

25

the panel consider this to be -- any of these comments to be

mpb5

1 an adverse comment?

2 A I do not consider these to have any reflection
3 on the ability of CP&L to manage the construction of the
4 Harris facility.

5 CHAIRMAN SMITH: I might say, Mr. Erwin, I had
6 overlooked that response when I made my comment to you, which
7 I now regret making.

8 MR. ERWIN: Well, if I'd had simple straight-
9 forward answers we would have gotten to that point about an
10 hour and a half ago.

11 BY MR. ERWIN:

12 Q Now I ask the witnesses to turn to page 55 of the
13 testimony.

14 CHAIRMAN SMITH: Are you done with this line, now?

15 MR. ERWIN: Yes. I'm sick to death of it.

16 CHAIRMAN SMITH: Well, now --

17 MR. ERWIN: I've finished questioning all of the
18 members of the panel as to the attachment. I have no further
19 questions in this hearing regarding this specific attach-
20 ment addressed to these people, unless there's --

21 CHAIRMAN SMITH: And there's nothing pending
22 before me right now to rule on?

23 MR. ERWIN: I don't believe so.

24 CHAIRMAN SMITH: That's my memory too.

25 MR. ERWIN: I have absolutely no reason to object

mpb6

1 to anything that the Chair has done at this point, and if I
2 have not properly withdrawn any objection, I do so now.

3 CHAIRMAN SMITH: Okay. That's clear. Let's go
4 on.

5 BY MR. ERWIN:

6 Q On page 55, your answer to this first complete
7 question is:

8 "Based on our reviews of the dockets
9 and our discussions with members of the
10 Branch staff, no issues have been raised
11 which gives us concern regarding CP&L's
12 ability to construct the Harris facility."

13 Again, I'm asking for a definition. You used
14 "issues" here, "factors" there.

15 A (Witness Murphy) We probably used them more or
16 less synonymously without any real --

17 Q I'm asking how you used them.

18 A -- without any references to their nuances or
19 meanings.

20 Q Now when you used the word "issues" here, you
21 don't mean to say that you never heard anybody question
22 CP&L's ability to construct the Harris facility?

23 A Recognizing the limitations of our review, based
24 on the docket and the discussions with the members of the
25 Construction Branch, my answer to you would be that I am not

mpb7

1 aware of issues.

2 Q Now, Mr. Cantrell is not -- surely you don't mean
3 to say that you're not aware of the controversy surrounding
4 Mr. Cantrell's recommendation?

5 A I am well aware of the controversy surrounding
6 Mr. Cantrell's position.

7 Q You're not concerned in any way about that?

8 A Are you still referring to the one question here?

9 MR. REIS: Mr. Chairman, I object. The answer
10 clearly says the Branch Staff. I think we've had it defined
11 before what the Branch was.

12 We're talking about the Construction Branch and
13 we're talking about the ability to construct the Harris
14 facility.

15 CHAIRMAN SMITH: Okay. I had a concern about
16 that question myself in my notes here.

17 Part of the problem is that it's a question
18 that could have been answered, I thought, yes or no. But
19 it's a qualified answer, and therefore it requires some
20 further inquiry.

21 Frankly, I do think that that seems to be a
22 hedged answer.

23 WITNESS MURPHY: Sir, I and the members of the
24 Branch are attempting to speak only from the position of the
25 Branch. If you expand the question to include the regional

mpb8 1 staff, then I would have to say that this testimony would be
2 changed, the answer to the question would be changed to
3 reflect the change to the question. And that we are aware
4 that there is an issue raised by Mr. Cantrell concerning the
5 ability -- I don't know if his concern is about the ability
6 to construct or the ability to operate the plant, but I am
7 aware that he has raised a question about it.

8 CHAIRMAN SMITH: Okay.

9 Now this goes back to qualifying answers of the
10 panel in discussions earlier.

11 Do you, sir, Mr. Murphy, have any remaining
12 concerns on the ability of CP&L to construct Shearon Harris
13 properly, do you, sir, from any source whatever?

14 WITNESS MURPHY: Please restate the question.
15 It would be very easy to go from yes to no in the answer.

16 CHAIRMAN SMITH: Would you read the question
17 back? And if you're unhappy with the question, tell me, and
18 I will try to give you one that is clear.

19 (Whereupon, the Reporter read from the record
20 as requested.)

21 WITNESS MURPHY: My answer would be no. But I
22 would qualify it that the -- I have not examined an issue
23 raised by Mr. Cantrell, referring to the operations of
24 Brunswick and Robinson. And I do not know of any informa-
25 tion there that would reflect on CP&L's ability to construct

mpb9

1 Harris. If there was information that I might be -- that was
2 in his concerns that I am not aware of that might reflect on
3 that, then certainly I would reflect his concerns in my
4 concerns.

5 CHAIRMAN SMITH: Fair enough.

6 How about the other members of the panel, bearing
7 in mind that your testimony has been adopted by each individ-
8 ual? Do any of you have any remaining concerns on the
9 ability of CP&L to construct Shearon Harris properly?

10 WITNESS BRYANT: No, sir, I have no concerns in
11 this matter.

12 WITNESS HERDT: I have no concerns, sir.

13 WITNESS MC FARLAND: I believe the testimony
14 that I have subscribed to says that within the program
15 there are no concerns.

16 CHAIRMAN SMITH: Well, now, see, this is where
17 we have problems.

18 DR. LEEDS: Sir, what the Chairman is trying to
19 do, I think, is take you out of the program and say -- he's
20 asking you as an individual, with the background and so forth,
21 regardless of what program you're in.

22 WITNESS MC FARLAND: But you do recognize there
23 is a program which will continue throughout the stages of
24 construction. We will man this; we will have experienced
25 personnel going through it. Accept all that, our management.



10
11
12



13
14
15



mpbl0 1

2 Our input is such that we have no concerns, but
3 what they will be able to construct it properly.

4 CHAIRMAN SMITH: You, you, sir.

5 WITNESS MC FARLAND: I personally have no concerns.

6 That's right.

7 CHAIRMAN SMITH: Mr. Brownlee, please.

8 WITNESS BROWNLEE: I have no concerns, sir.

9 CHAIRMAN SMITH: I'm sorry to interrupt you, Mr.
10 Erwin.

11 MR. ERWIN: That's all right.

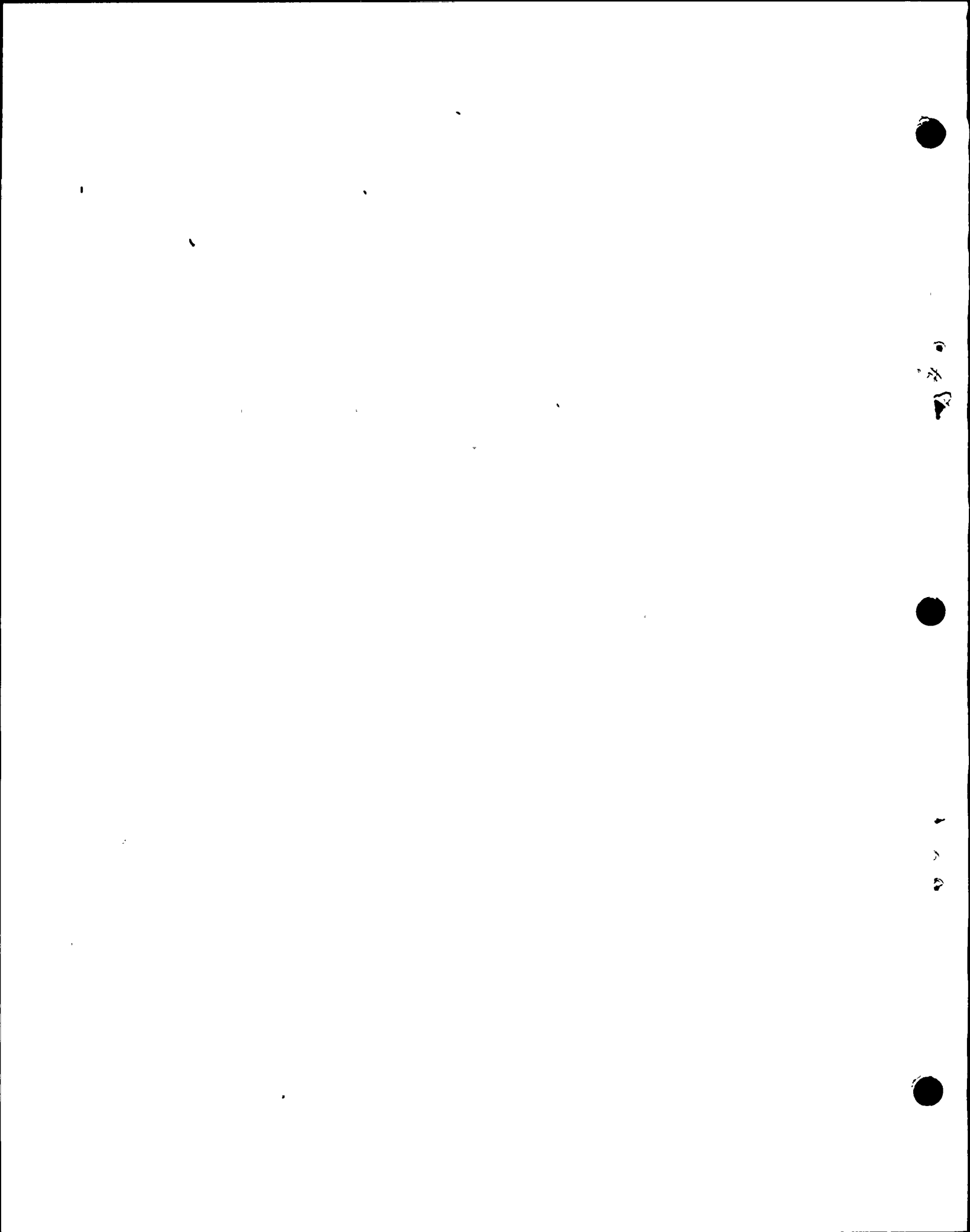
12 I have no further questions.

13 MR. REIS: Before we adjourn for the day, I've
14 had several requests from my potential witnesses of how far
15 we're going to get on this and whether I can let some of
16 them go back to their regular tasks and return next week.

17 I don't know whether the Board or I or all of us
18 collectively can make any predictions. If it is possible to
19 release some people until next Tuesday, I certainly would like
20 to do so; particularly Mr. Schwencer and Mr. Haass who came
21 down from Washington are anxious to get back, as well as the
22 two inspectors on that last quality inspection, CP&E Messers.

23 CHAIRMAN SMITH: Wessmen?

24 MR. REIS: Not Wessmen. Mr. Ruhlman,
25 R-u-h-l-m-a-n, and Kellog, who are two of the authors of the



mpb11 1 report 7902, which I supplied to the Board at the beginning
2 of this proceeding, indicating the inspection results mailed
3 out on February 21st of this year.

4 CHAIRMAN SMITH: Oh, I didn't understand. Those
5 people are available as witnesses on that?

6 MR. REIS: The Applicant indicated they wanted to
7 ask some questions of them on it, and I thought the Board
8 might want to. And it's quite current, and they are sitting
9 here in the hearing room. I brought them down this morning
10 for the Board's consideration thinking we would move along
11 faster.

12 CHAIRMAN SMITH: Had I overlooked that? Or had
13 you mentioned that to us before?

14 MR. REIS: I don't think I mentioned it to you.
15 I think I mentioned it very quickly in passing that the
16 Applicant wished me to make some of these people available
17 so they could ask some questions on this.

18 DR. LEEDS: I think he said something to the
19 effect that the Applicant would have no objections to intro-
20 ducing the inspection report providing you provide witnesses
21 to sponsor it, or something like that.

22 MR. REIS: That's right. I thought it would be
23 best to get the people who signed it down.

24 CHAIRMAN SMITH: We might as well go off the
25 record on this, unless somebody objects. Does anybody object?

mpb12 1

(No response.)

2

CHAIRMAN SMITH: All right.

3

Off the record.

4

(Discussion off the record.)

5

CHAIRMAN SMITH: On the record.

6

We will resume at nine o'clock.

7

(Whereupon, at 5:45 p.m., the hearing in the above-entitled matter was adjourned, to reconvene at 9:00 a.m., the following day.)

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

