# ORIGINAL UNITED STATES NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF: SHEARON HARRIS NUCLEAR POWER PLANT

### DOCKET NO:

50-400-0L 50-401-0L

LOCATION: APEX, NORTH CAROLINA

PAGES: 5844 - 5989

DATE:

0

8410310412 841026 PDR ADUCK 05000400

PDR

FRIDAY, OCTOBER 26, 1984

## ACE-FEDERAL REPORTERS, INC.

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

NATIONWIDE COVERAGE

SueTraylor	1	UNITED STATES OF AMERICA
	2	NUCLEAR REGULATORY COMMISSION
	3	BFFORE THE ATOMIC SAFETY AND LICENSING BOARD
•	4	
		X
	5	In the Matter of: :
	6	CAROLINA POWER AND LIGHT COMPANY : Docket Nos. 50-400-OL and NORTH CAROLINA EASTERN : 50-401-OL
	7	MUNICIPAL POWER AGENCY :
	8	(Shearon Harris Nuclear Power :
	9	Plant, Units 1 and 2) :
	10	
	11	
	12	Ramada Inn, Interstate 55
		ECU Room
•	13	Apex, North Carolina
	14	Friday, October 26, 1984
	15	The above-entitled matter reconvened, pursuant
	16	to notice, at 9:30 a.m.
	17	BEFORE:
	18	JAMES L. KELLEY, ESQ., Chairman
	19	Atomic Safety and Licensing Board Nuclear Regulatory Commission
	20	Washington, D. C. 20555
		DR. JAMES H. CARPENTER, Member
	21	Atomic Safety and Licensing Board Nuclear Regulatory Commission
•	22	Washington, D. C. 20555
	23	DR. GLEN 1 O. BRIGHT, Member
	24	Atomic Sefety and Licensing Board Nuclear Regulatory Commission
Ace-Federal Reporters,	, Inc. 25	Washington, D. C. 20555

Sim 1

1

2

#### APPEARANCES :

On Behalf of the Applicants:

3 THOMAS A. BAXTER, ESQ. JOHN H. O'NEILL, JR., ESQ. 4 MICHAEL A. SWIGER, ESQ. Shaw, Pittman, Potts & Trowbridge 5 1800 M Street, N. W. Washington, D. C. 20036 6 SAMANTHA F. FLYNN, ESQ. 7 Carolina Power and Light P. O. Box 1551 8 Raleigh, North Carolina 9 On Behalf of the NRC Staff: 10 CHARLES BARTH, ESQ. JANICE MOORE, ESQ. 11 Office of General Counsel Nuclear Regulatory Commission 12 Washington, D. C. 20555 13 BRADLEY W. JONES, ESQ. Nuclear Regulatory Commission 14 Region II 101 Marrietta Street 15 Atlanta, Georgia 30303 16 On Behalf of the Intervenors: 17 WELLS EDDLEMAN 718-A Iredell Street 18 Durham, North Carolina 27705 Appearing pro se 19 20 21 22 23 24 Ace-Federal Reporters, Inc. 25

						5846
1			<u>N T S</u>			
2	WITNESSES	DIRECT	CROSS	REDIRECT	RECR	OSS BOARD
3	George A. Kanakari:	5				
4	Roland M. Parsons Larry F. Garner			5864	58	186
5	(Resumed)					
6						
7						
		INDEX OF	EXHIBI	TS		
8		INDER OF	BAILDI			
9	Exhibit No.			Identif	ied	Received
10	Eddleman Exhibit N - TP 15, Rev. 11.	0.11		592	2	
11	Eddleman Exhibit N	0. 12		592	3	
12	- CQC-13. (NOTE: Court	Copy not Reporter)	provide	ad		
13	Eddleman Exhibit N - OCI-13-1	o. 13		592	23	
15	Eddleman Exhibit N			592	24	
16	- Batch Plant Insp		•	592		
17	Eddleman Exhibit N -Sieve Analysis -			554		
18	Eddleman Exhibit N - Work Procedure W		10.	592	25	
19	Eddleman Exhibit N			592	25	
20	- Suppl Response t for Production of	Docs, dtd	May 25	st,		
21	1984.					
22	Eddleman Exhibit N - EBASCO Spec Cond	rete				5943
23	CAR-SH-CH-6, Rev.	11				
24						
Reporters, Inc. 25						

Wal

Ace-Federal Ri

#1-1-SueT 1

2

3

4

5

6

7

8

9

10

11

13

14

15

16

17

18

19

20

21

22

23

24

### PROCEEDINGS

(9:30 a.m.)

JUDGE KELLEY: We are on the record this morning, 9:30. We are experiencing a delay in the start of today's hearing. Mr. Eddleman called shortly before 9 to inform the Board that he was sick, and some doubt about whether he would be able to appear today.

And this is just to reflect briefly the fact that the Board Chairman had a discussion with him, and had a discussion with the other members of the Board and counsel, and then some further discussion with Mr. Eddleman. And the upshot of it all was that Mr. Eddleman will attempt to be here 12 right around 11 with the expectation that we may get in about a half a day of hearing, say, from 11 to 3, something like that.

And so we are now essentially waiting, and we may do a few things just in the interest of getting them done in the interim. But the Learing itself, in terms of questioning of the witnesses, will not begin in all likelihood until shortly after 11 or later, or conceivably may not occur.

We regret this development. Of course, when the parties are sick, the parties are sick and there is just not a lot we can do about that.

One thing that we thought we might go ahead and do, it seems to us appropriate to use some of this othe wise dead

Ace-Federal Reporters, Inc.

#1-2-SueT

1

2

3

4

5

6

7

8

9

10

11

14

15

16

Ace-Federal Reporters,

time to take care of some things that we can do without Mr. Eddleman and without any Intervenors actually present, they don't involve input from all parties, they don't involve dispute, it's just a matter of getting something on the record.

We, for example, have a ruling on a matter that was argued yesterday. We will not be hearing further from the parties. We are simply going to make the ruling. And it will be in the transcript, and I will be loaning Mr. Eddleman my transcript, and when he comes we can tell him in quick summary what the result was. But, since that does take time also we might just as well do it now.

Do any of the parties see any problem in proceed-12 ing in that manner on this point? 13

MR. BAXTER: No, sir.

MR. BARTH: No, sir.

JUDGE KELLEY: Okay. We heard argument from the parties yesterday on the question whether the time for filing 17 findings of fact on the management contention known as Joint 18 Contention 1 ought to be delayed essentially until after the 19 exhaustion of administrative appeals from a denial in part of 20 a Freedom of Information Act request by Mr. Eddleman, dated --21 the denial is dated October 19, 1984, addressed to Mr. 22 Eddleman and signed by J. M. Felton of the NRC. 23

Strictly speaking, we don't have to decide this 24 Inc question now. We could decide it when we set the time for 25

#1-3-SueT

1

2

3

4

5

6

7

8

9

10

20

21

22

23

24 Inc.

25

Ace-Federal Reporters

finding filings. That's when the crunch comes on this point. But we think that it's better for the parties to know our intention now. So, we are going to go ahead and give our ruling, and then the parties can plan accordingly to the extent that our ruling may affect their plans and actions.

And our ruling is that we will not delay the due date for findings pending the resolution of the administrative appeal of the FOI matter I just referred to. We will set that date in accordance with factors that we usually consider. But that appeal will not be one of them.

11 On the other hand, if the Intervenors file a prompt 12 appeal and I believe -- what's the deadline in th letter, 30 days, file a timely appeal from that denial and send the 13 Board a copy of the appeal papers or a letter, the Board will 14 15 thereupon write a latter to the Executive Director of Operations 16 and request that he give that appeal expedited consideration under the circumstances of this case. That is, to say it's an 17 appeal that could impact pending litigation, and would he please 18 19 move it to the front of the stack.

We think that the question presented was fairly debatable. On the one hand, the Intervenors have an understandable interest in material underlying the SALP IV report. We think the Board has discretion in the matter and that we could, if we thought it was on balance the best thing to do, delay our finding due dates until after the appeal was completed. #1-4-SueT

1

3

4

22

23

24 Inc 25

But we think on balance it's not the advisable or fair thing to do. It is true, as the Applicants point out, 2 that the FOI process is outside the litigation process, and although we are not precluded from considering such factors it is not a desirable posture in our mind to have the litigation 5 process held up by a parameter we can't control beyond a 6 request like the letter we were talking about. 7

There is, we think, a strong interest in moving this 8 case forward, getting the findings filed and while the hearing 9 is still relatively fresh in the minds of us who heard the 10 evidence. And we think that's true, notwithstanding the 11 recently announced delay in the fuel load date for Shearon 12 Harris. 13

Another factor which -- though certainly not 14 decisive, but it has some influence in our minds, is the fact 15 that it's like a stay request. In essence, it's a request 16 for delay. And we think that we are entitled to consider 17 the likelihood of success in the merits on this appeal. And 18 we think that the chances that an appeal from a denial of an 19 FOI request, based on draft material, assuming it's all 20 properly characterized as draft material, is rather small. 21

Again, assuming this is all material within Exemption 5. We would expect the EDO would probably sustain the denial in whole or in part. So, we don't think it's going to produce very much.

#1-5-SueT

And beyond that, maybe most significantly in our minds, we don't believe that any substantial prejudice will flow to the Intervenors by our not pegging the due date for findings to the administrative appeal. And this is demonstrated best perhaps by looking at a calendar. We are going to be setting a date for findings some time next month at the conclusion of this safety hearing. And given the days in the applicable rule -- and when you add them all up -- come pretty close to two months. And quite apart from the rule, the Board has other the Board can sit other times.

But the fact of the matter is, we don't envision findings here before the first of the year at the earliest.

Sim1-1

1

2

3

4

5

6

7

And the Board's decision will be at some significant period of time after that. So that if the appeal does get decided sometime before Christmas, we don't see any reason why the intervenors can't file a motion to reopen along the lines that have been discussed and the applicants and the staff can respond to it and it could be phased in with the findings schedule we are quite likely to adopt.

And even if that doesn't happen, and if the administrative appeal gets decided right around the time of the findings due date or shortly thereafter, the intervenors would still be able to file a motion to reopen and that can be responded to. If it is granted to some extent, there could be some presumably brief supplemental findings that could come in at that stage and be considered.

It is only on the supposition that this appeal won't get decided until late winter that this carries with it the prospect that we will decide the case before they can get their FOIA appeals decided. And we just think that that prospect is so unlikely that it is something that is not entitled to any weight.

So our ruling I have stated and those are our reasons, and we will then address the due date for findings question at the conclusion of this set of hearings and set it in accordance with the usual standards.

ce-Federal Reporters, Inc.

21

22

23

24

25

The telephone is ringing. Off the record.

1

2

3

4

5

6

7

8

9

10

11

12

13

21

22

23

24

Inc

25

Federal Reporter

(Discussion off the record.)

JUDGE KELLEY: Let's go back on the record.

We are going to have some discussion about witness availability and logistical and timing questions coming up in the next week or so.

Again, we think this is the kind of thing that we can talk about properly under the circumstances in Mr. Eddleman's absence, but he will have a resume at least of what got said or whatever got decided when he comes today or sometime today, and he will also have a full copy of the transcript.

MR. BAXTER: I can give you my perspective on where we stand at this point, Mr. Chairman.

Under the normal order of testimony presentation that had been laid out after this panel, and I have no idea how close we are to completing their testimony, we have the five subpoenaed witnesses, then Mr. Eddleman's witness, Stokes, and then the staff's panel. And we had all agreed that on Thursday, November 1, we would interrupt to take up Joint Contention 4.

I think it had been the hope of the Board and parties that this contention, Eddleman 65, would be completed by that time.

Mr. Eddleman has indicated to us that Mr. Stokes will be here Tuesday and that he would like to complete his that day. We are willing to accommodate that and have this panel's testimony interrupted if we are still with this panel.

2-3

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

aderal Reporte

I would not expect our cross-examination will take very long at all because the testimony of Mr. Stokes is an affidavit that was filed in June during the summary disposition process and we have completely responded to it in the written testimony.

On the other hand, Mr. Eddleman has also indicated that Mr. Stokes is going to bring with him on Tuesday written rebuttal testimony which Mr. Eddleman would also like us to examine that day.

I anticipate substantial argument, legal argument against that whole proposition, and if for some reason the rebuttal testimony was entertained, it may take a considerable amount of time to prepare for that.

JUDGE KELLEY: Okay.

MR. BAXTEP: That is my estimate as to where we stand.

JUDGE KELLEY: Yes, that is helpful. I think, too, that what you have just said, I think it is sort of a resume of what has been said before.

Is there anything really new other than the fact that we are knocked off schedule with regard to this panel today, but the Stokes business and so on you said before, did you not?

MR. BAXTER: Yes. I think this is just a consolida-

tion.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

JUDGE KELLEY: Right. Fine.

Staff?

MR. BARTH: I have no differing views from those expressed by Mr. Baxter, Your Honor. I do not contemplate that the examination of Stokes by the staff on the substance of his direct testimony will take more than an hour.

The voir dire may take less than an hour. I have heard that Mr. Stokes will bring rebuttal testimony. There is no question that we will want to look at that very closely in terms of the legalities, that is, does it explain or rebut something new and unexpected in the direct testimony by the staff or the power company.

So we may have legal argument vigorously on that aspect of it. I can't predict that kind of time, Your Honor.

JUDGE KELLEY: Okay. I guess I was expecting certainly we would finish 65 before next Thursday, but for today's development, and now it is sort of hard to tell.

MR. BAXTER: One other piece of information that I think also has been put on the record, but what I didn't mention is that Mr. Runkle for the Joint Intervenors will be doing the cross-examination on Joint Contention 4, which should relieve Mr. Eddleman toward the latter part of next week. And it might be that we could push the hours on

1

2

3

4

5

6

7

16

17

18

19

20

21

22

23

24

Inc.

25

Ace-Federal Reporters,

Tuesday and Wednesday next week to finish this contention. I know that would be pushing him, but then it would just be two days and then he could recovery if necessary.

I think it would be very useful not to have the full week and a half interruption that would come about from the TLD contention and the week we are taking a recess and then have to return to the concrete issue again.

MR. BARTH: We would make a suggestion that might 8 help along that line, Your Honor. In discussing this with 9 my co-counsel it appears to us that we might well reconvene 10 Monday morning at 9 o'clock in order to make up for this 11 lost day and that would somewhat alleviate the problem of 12 having lost most of today. It would give Mr. Eddleman time 13 14 to recover his ebullience. 15 JUDGE KELLEY: Do you favor that?

MR. BARTH: Yes.

MR. BAXTER: I:certainly think we would, too.

JUDGE KELLEY: What about 11?

(Laughter.)

MR. BAXTER: We are always willing to compromise, or almost always.

(Laughter.)

JUDGE KELLEY: Why don't we revisit that suggestion after Mr. Eddleman is here. It is out on the table and it has some support and see what the consensus is. There would

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

18

21

22

23

24

1nc.

be the problem of finding ourselves a hall. I don't know whether this is available or not.

(Board conferring.)

JUDGE KELLEY: I guess at least a quorum of the Board is willing to come down. I shouldn't say that. Well, anyway, maybe we should look for a room seriously. We can't do it without a hall. After we stop here, and it is very shortly that we are going to run out of things to do, and we may have run out right now, we might make a few calls and see what is available. I can call the Bankruptcy Court.

We are in the Bankruptcy Court Tuesday and Wednesday anyway. I don't know. Could the applicants do a little research and maybe the staff, too, and the Board and maybe between the three of us we can find a good place to hold the hearing. A phone call or two is all I mean.

Well, is there anything else that we should raise at this point or should we just have coffee?

MR. BAXTER: I can't think of anything.

JUDGE KELLEY: Okay. We will just go off the record until Mr. Eddleman arrives.

end take

Ace-Federal Reporters

(Recess.)

3-1-Wal

1

(11:40 a.m.)

JUDGE KELLEY: Back on the record. We are starting late, about 11:30, because Mr. Eddleman is now well. He is with us now, and was not with us earlier, and is not feeling very well, and we will just have to see what we can get done, and take it as it goes.

7 I think it might be well to discuss for a moment
8 where we have been so far as I understand it from this
9 contention, and where we might hope to go next, and what we
10 can reasonably expect to get to today.

We got started here yesterday afternoon on the concrete panel, and we had some questioning of a background nature. We had some questioning based on some discovery material, interrrogatory material. This is just by way of sort of overview.

This is a rather unusual contention in that it is tied to some particular pieces of evidence, namely some particular pour packages that were turned over in discovery, and its first sentence says, in effect, these packages will disclose defects in these particular areas of the containment.

We allowed some questioning from the procedures -not procedures -- we allowed some questioning from the interrogatories.

I should note that the Applicants testimony itself in its first number of pages, goes over some rather general

Ace-Federal Reporterr, Inc.

24

25

1	matters of how concrete is poured, and what the more important
2	procedures are and so forth, just as context.
3	The questioning was not particularly tied to that,
4	but rather to deposition material. We had an objection that
5	we were really outside the scope of the contention.
6	We had some discussion over whether, and to what
7	extent, QA problems would be revealed by the pour packages
8	themselves as opposed to other documents, and as I understand
9	it, the Board understands, we pretty well got through
10	that deposition material and quit last night.
11	Mr. Eddleman has distributed some materials which
12	he proposes to use in cross examination, and they are
13	essentially EBASCO procedures for concrete, described in the
14	most general terms I can think of, and indicated his interest
15	in my talking with him earlier, in asking some questions based
16	on that.
17	I guess I indicated one concern, that these pro-
18	cedures are extremely long and detailed. We do have some
19	general discussion of procedures in the testimony. As a matter
20	of a technical hearing procedure, the cross examiner is bound
21	by the scope of the direct testimony.
22	Now, there may relationships between the direct

and the procedures, I am not saying there aren't; but it is 23 sort of a matter of degree.

Ace-Federal Reporters, Inc.

25

24

I guess on the face of these lengthy detailed

procedures, I would question whether very lengthy questioning 1 based on them is warranted. That is not a ruling. It is 2 just an indication of the Board's general approach. 3 Let me stop there and ask Mr. Eddleman what he 4 feels prepared to go forward with, and what he has in mind 5 with regard to these EBASCO procedures. 6 MR. EDDLEMAN: Unfortuntely, just what I think you 7 said was on shakey ground. 8 JUDGE KELLEY: What do you have in mind as cross, 9 based on these exhibits. 10 MR. EDDLEMAN: If I can explain what I had set up 11 in my preparation last night. I was going to go through the 12 procedures first. It is my understanding of what a pour 13 package shows, that if it is out of specification or not 14 in compliance with the codes and procedures, that that is what 15 Mr. Stokes was talking about. That is where I was going with 16 17 that. So, I started in on that, and basically just 18 couldn't stay awake, and tried to take a nap, and ended up 19 sleeping until about nine o'clock this morning, and waking 20 up with a sore throat, and associated cold and so on, it 21 appears. 22 I think I am able to go on here some, but when I 23

24 ce-Federal Reporters, Inc.

25

I think I am able to go on here some, but when I sat down to continue preparing, what I kept on doing was working through those procedures.

I hadn't tried to do the pour package. I am not sure that my brain function is up to doing that right. That is the most important part. I would rather do the part that is, should I say, a little less important, or a little more mechanical, and that is what I tried to do.

5861

JUDGE KELLEY: Well, we talked on the phone and you indicated you would prefer not to get into the pour package, at least in any depth, because of the way you felt, and so that is not a surprise.

And I understand you also said you wanted to get into these procedures. I am just saying that looking at these procedures, the Board has some concern about where we are going.

One first thinks it is pour packages that are in this case, and the next thing we know we are into this, and the case just goes off in all directions, unless it is pretty tightly tied to the pour packages in some way.

I don't mean to anticipate. The Board doesn't generally make objections, we rule on them. I am giving you an expression of concern about the depth in which we should go into these procedures. But it is up to the parties to object, and we would like to see objections in context, and not as an abstract matter at the beginning.

So I am not precluding any, at this point, any questioning on the procedures. I am expressing a doubt as

ce-Federal fleporters, Inc.

18

19

20

21

22

23

24

9

to whether we can go through a line by line exercise on these procedures when we don't think that is the most important thing before the house.

There is another area that I will just mention to you as a possibility. We talked a little bit about the pour packages yesterday, and what is in them, what they show. For example, this form at the back, QA 74 Rev. 2, we talked about that a while.

MR. EDDLEMAN: Judge, do you mean QA 24?

JUDGE KELLEY: I guess I do. 24, Rev. 2, right. It occurs to me if there are other aspects of the pour package itself that you think are ambiguous or you don't know what they mean, it is one thing I suppose to get into detailing questioning of some particular reports, and another thing to say what does this part of the form even mean.

And I would think if you have any need for clarifying questions on what is in the package in terms of the forms, that might be appropriate.

MR. EDDLEMAN: I can try to get into that some. I haven't prepared it out, but I have some idea. I think I can do that better off the top of my head in terms of things that are unclear. I have had some review of these things now, and I think I know the kinds of questions I want to ask about that.

Ace-Federal Reporters, Inc. 25 JUDGE KELLEY: That might a useful way to spend some

3-6-Wal

1 time.

MR. BAXTER: I would just point out also, Mr.
Chairman, that our direct testimony does discuss each of these
pour packages. You can cross examine to some extent from what
we said here, as well as what is in the package, and Mr.
Stokes testimony addresses them also.

JUDGE KELLEY: Yes. I think with that you can go
ahead, Mr. Eddleman, and we will see how it goes. But I
just thought the Board ought to make a couple of comments
about its slant on things at this point. That might be
helpful.

MR. EDDLEMAN: Okay. And I am just taking this as it comes. I think my voice is functional as long as I keep it lubricated.

End 3. SueT fols. 12

13

14

15

16

17

18

19

20

21

22

23

24

Inc. 25

Ace-Federal Reporters,

#4-1-SueT	1	MR. BAXTER: If I might, I have one open question
	2	left over from yesterday that we have an answer for.
	3	Whereupon,
•	4	GEORGE A. KANAKARIS,
	5	ROLAND M. PARSONS
	6	and
	7	LARRY F. GARNER
	8	resumed the witness stand as witnesses called by and on behalf
	9	of the Applicants, Carolina Power and Light Company and North
	10	Carolina Eastern Municipal Power Agency, and having previously
	11	been duly sworn, were further examined and testified as fol-
	12	lows:
	13	REDIRECT EXAMINATION
	14	BY MR. BAXTER:
INDEXXXX	X15	Q Mr. Eddleman asked, Mr. Parsons, other than the
	16	two basemat pours to select what other of the eleven pours
	17	represented instances of relatively heavy rebar congestion,
	18	and you were asked to give a look at the pours over the break
	19	and come back with an answer.
	20	Do you have that now?
	21	A (Witness Parsons) Yes, sir. Our Exhibit Number 11,
•	22	that's Placement Number 1CBXW242001, was one of the difficult
	23	ones. It was around the escape lock.
Ace-Federal Reporters	24	Our Exhibit Number 12, 1CBXW256004, was a difficult
ALE PEDERAL Neporters	25	one, around the personnel air lock.
	13.24	

1

#4-2-SueT

1

2

3

4

5

6

7

8

9

10

Our Exhibit Number 14, Number 1CBXW290001, was another difficult one. And those are the only three that I would characterize as being maybe more difficult than some of the others.

Q Reviewing the transcript, there is some confusion in the record, in my view, about -- a question about an Interrogatory where the Interrogatory itself isn't there, and the answer was about cover requirements. And I think we may have gotten rebar spacing requirements and cover requirements intermixed somewhat.

Mr. Kanakaris, could you go over again for us what the rebar spacing requirements for the basemat are, and what the cover tolerance and cover requirements are for exposed concrete?

A (Witness Kanakaris) Yes, I can. The minimum rebar spacing is four and a half inches. But that's a clearance.

In other words, from edge to edge of the rebar. And the tolerance for that spacing is an inch and a half. The minimum cover for the rebar and the mat is three inches, and the tolerance on that is also an inch and a half, plus or minus.

MR. BAXTER: Thank you.

JUDGE KELLEY: I don't want to get us off-track
but I just remembered I would like to mention a couple of
things that happened this morning you came, Mr. Eddleman, just

Ace-Federal Reporters, Inc.

#4-3-SueT

1

2

3

4

5

6

9

10

23

24

Ace-Federal Reporters, Inc.

so you know it now and it will be in the record. We went ahead and we gave a ruling which is in the record -- and I will loan you my transcript as soon as it's available --

MR. EDDLEMAN: Thank you.

JUDGE KELLEY: -- on this business of the appeal of the FOIA and so on. And we decided that we would not hold up the findings for that appeal, but that on the other hand 7 as soon as you have filed an appeal, you and Mr. Runkle I 8 mean, if you do that the Board will write a letter to the EDO asking him to give it expedited consideration.

And I think as a practical matter you should get 11 your ruling in time so that if you get anything out of the 12 appeal you can make use of it. 13

MR. EDDLEMAN: I appreciate that, Judge. By the 14 way, for the Board's information I did check in with Mr. 15 Runkle. He still anticipates being here, but he tells me 16 that he, too, is ill and has a doctor's appointment at 2:30 17 this afternoon and will have to leave for that. 18

But we were planning, and as far as I know, unless 19 this knocks both of us out a lot longer than the normal sore 20 throat, we will have an appeal out some time next week or soon 21 22 thereafter.

JUDGE KELLEY: That's fine.

MR. EDDLEMAN: As far as we can. And we will let the Board know when we do it. I am assuming I will remember, 25

#4-4-SueT 1	but I will make a note on my note thing here.
2	JUDGE KELLEY: We will put that in terms of a timely
3	appeal, and under the NRC procedure it's thirty days after
• 4	the denial.
5	MR. EDDLEMAN: Right. We will be well within that
6	I think.
7	JUDGE KELLEY: Fine. We talked a little bit, Mr.
8	Eddleman, about the expectations next week in terms of witness
9	availability and so on. I don't know that there are any sur-
10	prises in that discussion.
11	Can you capsule that briefly, Mr. Baxter?
12	MR. BAXTER: Yes.
13	JUDGE KELLEY: I should add, we are also talking
14	about coming in on Monday which effects things. In view of
15	losing a piece of today it depends on how much we get done
16	today, I guess. But we can decide that before adjournment
17	today, but we are leaning toward coming on on Monday, possibly
18	with a late start, in order to make up time from today.
19	MR. EDDLEMAN: Well, I don't guess I would have
20	any specific objection to that. I had been set up to be
21	somewhere Monday night which requires some travel, but I
22	think that we could make the schedule. In other words, I
23	think if we basically use half a day today, I could still be
24	finished with 65 as far as we now know the schedule on
25	Wednesday even if we didn't have an additional session on Monday

#4-6-SueT

1

2

3

4

5

6

7

8

9

10

11

14

22

23

24

25

Ace-Federal Reporters, Inc.

he would be available on Monday also, but in terms of his schedule he has got to be working on a couple of other things simultaneously with what he is doing for this hearing. Therefore, he said what he is going to try to do about written rebuttal is get a handwritten copy or a typed copy, if possible, to CP&L some time on Monday. And that's about as fast as he could come out with that.

And I know we haven't argued about it or anything. I'm just telling you what his schedule is. I'm not saying this is approved or that we have even made a motion for it yet. If he doesn't get it done, there won't be any motion.

12 That's the only thing I can see taking up more time. What I would like to try to do here with our panel is, 13 you know, lay as much of the foundation as I can for what I want to wrap up when I actually get into the details of the 15 packages, and I anticipate that no more than half a day of 16 that or probably less than that would be required when they 17 18 come back.

19 I don't know how much time Mr. Stokes will take, but that would still give about, oh, half a day for the sub-20 21 poenaed witnesses and half a day for the Staff.

JUDGE KELLEY: Do you envision taking these subpoenaed witnesses one at a time?

MR. EDDLEMAN: Mr. Baxter raised the possibility that they might like to appear as a panel. And I told him I

#4-7-SueT

1

2

3

4

5

6

7

8

9

10

13

14

17

18

19

20

21

22

23

24

25

would think about that. My inclination is that maybe two panels would be better from my point of view. But we haven't worked that out.

MR. BAXTER: I would like to have them appear as a panel. I think it would be more efficient. There is going to be some cross-fertilization of information, and I think some of the questions we have indicated on Mr. Eddleman's list so far are misdirected but are more properly directed to another person. And they are available to sit through it on that basis, and I think it would be more efficient.

11 I don't see how it harms anyone to have them all 12 five there at once.

JUDGE KELLEY: I simply raised the question initially from a time standpoint. In my own experience with back-to-back individual witnesses, there is no way in the world you can hear 15 from five of them in half a day. It just, you know, won't 16 work.

If you had a panel, or even two, you might be able to do that. So, are you willing to go with two, and then it's a question of whether you have two or one, or are you still interested in five individual appearances?

MR. EDDLEMAN: Well, let me put it this way. I don't want to, you know, burden the time or mess these witnesses up unnecessarily. I mean, they are here because basically I asked them to be here. I'm not trying to cause them any, you

Are-Federal Reporters, Inc.

#4-8-SueT

1

2

3

4

5

6

7

8

9

21

22

24

Inc.

25

Ace-Feyeral Reporters

know, unnecessary trouble. On the other hand, I think it might be better to split the panels, say, from the inspection standpoint and the preparation of the 24 item standpoint.

What I'm saying is, I don't want it to be a kind of split-the-difference thing, where you split the difference between a position that is already bargaining back a little bit from where I started off. I think it would be appropriate to have them in two panels. I think that wouldn't take too much time.

In fact, I could even set it up as saying if any 10 of these areas really should be asked to somebody else, just 11 tell me so right off the bat, and then I will only ask one 12 question along the line and they could say that should be 13 somebody else and I will note it down and I will ask them. 14 And these are approximate times. I don't want to -- how can I 15 say it -- be absolutely bound by them, but I think this 16 Wednesday evening finish, allowing that we might have to go 17 a little bit late, maybe an extra half hour or hour one of 18 the other days, is probably achievable. That's what I think. 19 JUDGE KELLEY: Well, that may be. I think I just 20

want to walk through it and understand what you are thinking about, because what drives us -- I think we want to finish this contention next week before we start the other. And if 23 we have to come down on Monday to do it, we will do that. So, we will have to decide this Monday question

1 pretty soon. #4-9-SueT MR. BAXTER: I have to say I guess I'm a little 2 skeptical about the two-day schedule that Mr. Eddleman just 3 outlined. 4 JUDGE KELLEY: We are not through with it yet, 5 are we? Did you finish your schedule? 6 MP. EDDLEMAN: I finished the rough outline. I 7 haven't thought it through. 8 JUDGE KELLEY: Maybe I'm the only one in the room 9 that doesn't understand. You have got this panel on, this 10 panel here. You are here Tuesday morning and you spend half 11 12 a day on the packages, right? MR. EDDLEMAN: No. I don't think it will take 13 14 that long. 15 end #4 Mary flws 16 17 18 19 20 21 22 23 24 Ace-Federal Reporters, Inc. 25

Sim 5-1	1	JUDGE KELLEY: All right. Less than a half a da	ay
	2	with this panel on Tuesday?	
	3	MR. EDDLEMAN: That is what I am estimating, yes	s.
0	4	JUDGE KELLEY: Okay. Then Tuesday afternoon is	
	5	Stokes?	
	6	MR. EDDLEMAN: I think that will be compatible.	
	7	JUDGE KELLEY: Half a day for him?	
	8	MR. EDDLEMAN: That is up to the applicants.	
1	9	JUDGE KELLEY: I know.	
	10	MR. EDDLEMAN: If he doesn't have much rebuttal	,
	11	I will only take about 30 minutes to put him up I think.	
	12	JUDGE KELLEY: So on Wednesday morning then you	are
	13	talking about the subpoenaed witnesses, right?	
	14	MR. EDDLEMAN: Yes, and we might even get to th	iem
	15	sometime on Tuesday afternoon, or get to the start of the	em.
	16	JUDGE KELLEY: And then all that leaves is the	
	17	staff; is that right?	
	18	MR. EDDLEMAN: Right, and I would estimate about	it
	19	a half a day for them.	
	20	JUDGE KELLEY: Okay. I understand then.	
	21	You had a comment?	
•	22	MR. BAXTER: My only comment is to walk through	n
	23	these 13 pour packages with essentially two different set	ts
Federal Reporters,	24	of applicants' witnesses and with a staff panel. I am ju	ıst
- Jourist Hoporters,	25	surprised it can be done that quickly. The staff's testi	imony

11

S

Ace-F

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

is 51 pages long, and there is a lot of analysis of these pour packages in there. I mean Mr. Eddleman obviously should know what he wants to do. I am just skep ical. And I would also welcome deciding this matter of the subpoenaed witnesses' presentation today while we have got more time then we will next week.

Based on the knowledge that I have of the issues, I still think it is going to be more efficient to have them all five here. To talk about the QA 24 form and ask about the individual numbers is going to require more than just the tester. It is going to require some of the knowledge that the CI people have as to what was done with those numbers.

And I can tell you we are going to end up having inefficiency and distruption by doing it in two bites, and I don't see what it harms Mr. Eddleman in any possible way to have them all five sitting there at one time.

JUDGE KELLEY: Let me just ask the staff and we will come back to this panel question.

Mr. Barth, what is your reaction to Mr. Eddleman's expectation for 65 next week?

MR. '3ARTH: From our point of view, Your Honor, we accept it. I see no problem if Mr. Eddleman is willing to commit to finish by Wednesday night. I think it would be ungracious of me not to accept his commitment to do so.

That gives us time to pad out or fill out more time

Ace-Federal Reporters, Inc.

1

2

3

4

5

6

7

8

9

16

17

18

21

22

23

more time on Tuesday night if we run late and on Wednesday night we might run late. But I certainly do accept his commitment to finish by Wednesday night. It seems to me there is no reason not to.

The argument as to the subpoenaed witnesses, as to whether they go on in one's, two's or three's, I think this is really none of the staff's business. I just have no opinion on that. That is a detail which really doesn't concern us.

JUDGE KELLEY: Okay. Let me go back to Mr. Eddleman.

By the way, I wasn't sure whether you were making a commitment in the sense of as far as you are concerned you will be done Wednesday evening or whether this was just a hope that you would be.

MR. EDDLEMAN: Well, it is between a hope and a commitment, Judge.

(Laughter.)

JUDGE KELLEY: What is that?

(Laughter.)

MR. EDDLEMAN: I don't know its name. Let me try to describe it.

JUDGE KELLEY: A cope.

MR. EDDLEMAN: A cope.

(Laughter.)

Ace-Federal Reporters, Inc. 25 If I can cope, then that is a good description. What I am saying is that I think any addition beyond

1

2

3

4

5

6

7

8

12

13

14

15

16

17

18

19

20

21

22

23

24

25

the sort of normal hearing time that we have been going for two days, assuming that I hold up through about three this afternoon with these witnesses and get in basically the foundation I want about the documents that I have supplied to them, or the one that they had was the concrete specification, and go through the items about the pour package that you suggested, and I think I will be able to do some of the stuff. I have a new copy of Applicants' Exhibit 9 here, which is as thick or thicker as the new one yesterday, and 9 I believe is therefore a more complete copy. It is not made 10 11 on this heavy paper.

Anyway, I am hoping to cover all that today. So really what I would have left with these gentlemen was just the packages.

You know, I don't want to be held to exactly a half a day, but you were talking about flexibility. In other words, if I ----

JUDGE KELLEY: I think if we were talking in terms of getting done Wednesday night, and we all know what that means, and if you want to spend more time on one part of it than another time, as long as it leaves the other parties their reasonable share, I don't think that is a problem.

MR. EDDLEMAN: The only assumption I am making in this is that we don't eat up too much time on lawyer argument. I mean I am actually thinking that most of the

Ace-Federal Reporters Inc

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

time would be on cross.

I don't know what the Board's feeling is about a possible evening session. I am thinking about a short one, maybe an hour or hour and a half, or going late half an hour one day or the other or an hour. But that is a possibility when I say I am thinking of getting it done Wednesday. But if it saves you coming down on Monday, it is more convenient to me personally not to have a Monday session. I would rather have more time later and that would also give me a little more recovery time from this bug that I have got.

Could we backtrack just a bit and we will get back to the panel here in just a minute I think. We have about covered this. But on the question of whether the five subpoenaed witnesses should be in one panel or two or individual, let me ask you how you feel that you are better off with two panels?

JUDGE KELLEY: Okay. I think I understand that.

I can see why the Board is better off with one, just from the point of view of having the person sworn in and sitting there and if he or she happens to know something that the other person doesn't know, from the standpoint of administrative convenience I have had panels up to 12 or 15 and it works reasonably well, depending on what you are talking about.

Ace-Federal Reporters, Inc.

I certainly don't see any problem with five in

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

terms of numbers.

What is the basis for your preference to not have them all on one panel?

MR. EDDLEMAN: Well, I think we are dealing with kind of two different levels of folks. You are dealing with some people who are up at the inspector or engineer level and you are dealing with some folks who are more like lab technicians or down actually on the job.

I would rather split them up that way for two reasons. One is just kind of a logical connection that if one ties into the other like the person who took the samples and the person in the lab might write it up. That is the way I was thinking about splitting it up.

Basically Mr. Breedlove, for whom I have the biggest outline, and Mr. Sealey and Mr. French would be the logical panel.

JUDGE KELLEY: And their jobs are, just so we will recall? Breedlove, Sealey and French are what? What do they do?

MR. EDDLEMAN: Breedlive and Sealey are construction inspectors or construction inspector supervisors I think, and Mr. French is an engineer on the concrete and was also in welding in another context.

MR. BAXTER: Mr. French was in construction inspection performing the same functions in a supervisory

Ace-Federal Reporters, Inc.

role that the other CI people were doing. The fact that he 1 2 has an engineers ---MR. EDDLEMAN: I will accept that. 3 JUDGE KELLEY: Okay. 4 MR. EDDLEMAN: And Ms. Woltz and Mr. Strictland ---5 Ms. Woltz is in the lab and I believe Mr. Strictland is one 6 of the people who -- they are the ones who sign on these, or 7 signed on some of these QA 24's. 8 JUDGE KELLEY: You say the first person is in the 9 10 lab? MR. EDDLEMAN: I think that is right. 11 JUDGE KELLEY: And the other person is where? 12 MR. EDDLEMAN: He is in the field but comes in and 13 signs the QA 24 report as to the stuff that is brought into 14 the lab is I think how it works. 15 MR. BAXTER: Not quite. Do you want to know? 16 JUDGE KELLEY: Yes, let's find out. 17 MR. BAXTER: All right. Mr. Strictland does the 18 field QC tests during the placements of air contents, slump and 19 temperature and makes up the compressive strength cylinders 20 which are then taken to the lab. Ms. Woltz does the com-21 pressive strength tests on those cylinders at the E&E Center. 22 JUDGE KELLEY: There is no ---23 MR. BAXTER: And they each sign these QA 24 forms 24 Are-Sectoral Reporters Inc 25 in various ---

Sim5-8

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

JUDGE KELLEY: It doesn't sound like there is a supervisory/subordinate relationship between the two of them. MR. BAXTER: That is right.

JUDGE KELLEY: Is there a supervisory/subordinate relationship between either of those two and the first three?

MR. BAXTER: No. But, as I indicated during the oral argument on these subpoena requests, and you can wait to find out for yourselves if you would like, those two QC employees do the tests and put the numbers down.

When Mr. Eddleman starts asking what happens then, it is going to be the CI folks who are going to be able to tell him what happens to that rejected or out-of-spec concrete and not those two people. And that is why I think having the five together is going to give him a better response overall to his questions.

MR. EDDLEMAN: Well, I think it would be cleaner to take the two testing people and the three supervisoring people separately just from my point of view actually going through the ---

JUDGE KELLEY: Do you think that they would affect one another's answers somehow?

MR. EDDLEMAN: Well, they might. I mean if you put a person in a bigger group, you know the bigger the group is, the more people who are around to potentially contradict them. I don't know what, you know, what the job relations

Ace-Federal Reporters, Inc.

Sim 5-9

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

Inc

25

Ace-Federal Reporters.

or personal relations of any of these folks are. I feel like it might be better to separate out the two levels. That is what I was partly getting at there. It is partly a logical question connection of you have got testers and you have got supervisor inspectors. It is partly also that.

Now, as I say, I don't know what extent it is, but I don't think there is any great harm in putting them into two panels. If the tester people say, well, what happens then is up to the inspectors, then, you know, if I take them first, then I will ask the inspectors next. I think that works.

By the way, let me note that I got back the letter I sent to Mr. Mountcastle as unable to forward and I have not yet heard from Mr. Troxtle, to my knowledge, although there may be a letter waiting for me at home. But I will certainly inform Mr. Baxter if I do hear anything from him, but right now I am just talking about the five who were known to be available.

JUDGE KELLEY: All right.

MR. BAXTER: We still, Mr. Chairman, have not heard any harm to Mr. Eddleman of putting these five people on together. We have heard a preference and his idea of what he thinks works better. I have given you mine and I just simply think the record is going to be more coherent, and these people are cooperating voluntarily with the Board and Sim, 5-10

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

Ace-Federal Reporters.

Mr. Eddleman and I don't see why we should be afraid of somebody contributing additional information to an answer. I thought that was the whole reason they were being called was because of Mr. Eddleman's assertion that this panel would not be able to answer all of his queations.

MR. EDDLEMAN: Well, I think it was this panel's direct experience, and I went through that yesterday, to a good extent, but I don't know. See, it is hard for me to say there is definite harm out there. I think if there is a potential for harm and it doesn't make a lot of difference to have the two different panels ---

JUDGE KELLEY: But what is the potential for harm? Let's nail that down.

MR. EDDLEMAN: Well, I think that there could be some inhibition of, you know, in the larger group of responses.

JUDGF KELLEY: Based on what though? I will give you an example. I mean sometimes witnesses are sequestered and that means that they are locked out of a room literally. because they have reason, say an employee is testifying against his supervisor. You get the supervisor out of the room so the man will speak up or feel more free to speak up and that makes sense.

What have we got in this context that leads us to be apprehensive that the employee may not say what is on his or her mind? Sim 5-11

1

2

3

4

5

6

7

8

9

10

11

12

13

14

16

18

19

20

21

22

23

24

25

MR. BAXTER: Let me be clear. I am sorry, Mr. Chairman, for interrupting again: Maybe Mr. Eddleman doesn't understand. Ms. Woltz and Mr. Strictland work in the QC organization. They are not in any supervisory relationship to the CI folks who are going to testify. The CI people, you may consider them higher in some way you are speaking of, but I don't understand that. They are in separate organizations. Ms. Woltz and Mr. Strictland do not report to these people in any conceivable way.

MR. EDDLEMAN: Well, as I say, without having deposed any of these people, I can't point to a specific identifiable harm. I do think, however, that just in general in organizations, you know, people at lower levels sometimes have a tendency to defer to the higher level people or shy back from them. I also ---15

JUDGE KELLEY: I thought these were more side levels than lower and upper. They do different things. 17

MR. EDDLEMAN: Well, I guess so. But what I mean is say if, oh, I am a socket welder and, you know, I am in the welding organization, and, you know, Mr. "X", let's :" say is an inspector in the concrete organization, he is still a higher level person than me and he has got more clout.

If I am there with him and he has a different view than my own, I might be a little shy about saying it. I don't know. I mean this is kind of wearing me down right

e-Federal Reporters Inc /Sim 5-12,

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 and I am not sure my mind is together and so on on it. So I guess, you know. I might just yeild for the purpose of not being worn out, you know, because I don't know if I am getting anywhere.

JUDGE KELLEY: Well, I think the issue has been posed and I think we have heard from both sides. I think we can decide it. If we don't want to decide it right now, we will talk about it and come back at the end of the day so we will know how to structure things.

Mr. Barth.

MR. BARTH: May I make a comment, Your Honor.

The idea of supervisor and subordinate has never been interjected into this hearing before. We had Mr. Utley, who is Executive Vice President, with vice presidents and with people who are not vice presidents on the same panel. We have had Mr. Bemis, who is a Supervisor in NRC, with inspectors who report directly to him and whose performance is directly related to how he grades him.

This kind of subordinate/supervisor issue just has played no role, and it seems to me it is spurious, and it seems to me we ought to do something to expedite this and, as Mr. Eddleman suggested, knock off the lawyer argument and get down to brass tacks and get the hearing going.

JUDGE KELLEY: Okay. I think we can rule on this before we quit today so you will know what we want to do.

Sim 5-13

1

14

22

23

24 Inc.

25

And I think then we can get back to the panel.

We didn't say anything explicit about lunch and what we were going to be able to do today. I think I mentioned trying for say 11 to 3. You wanted to get out a little early, do you not, Mr. Eddleman?

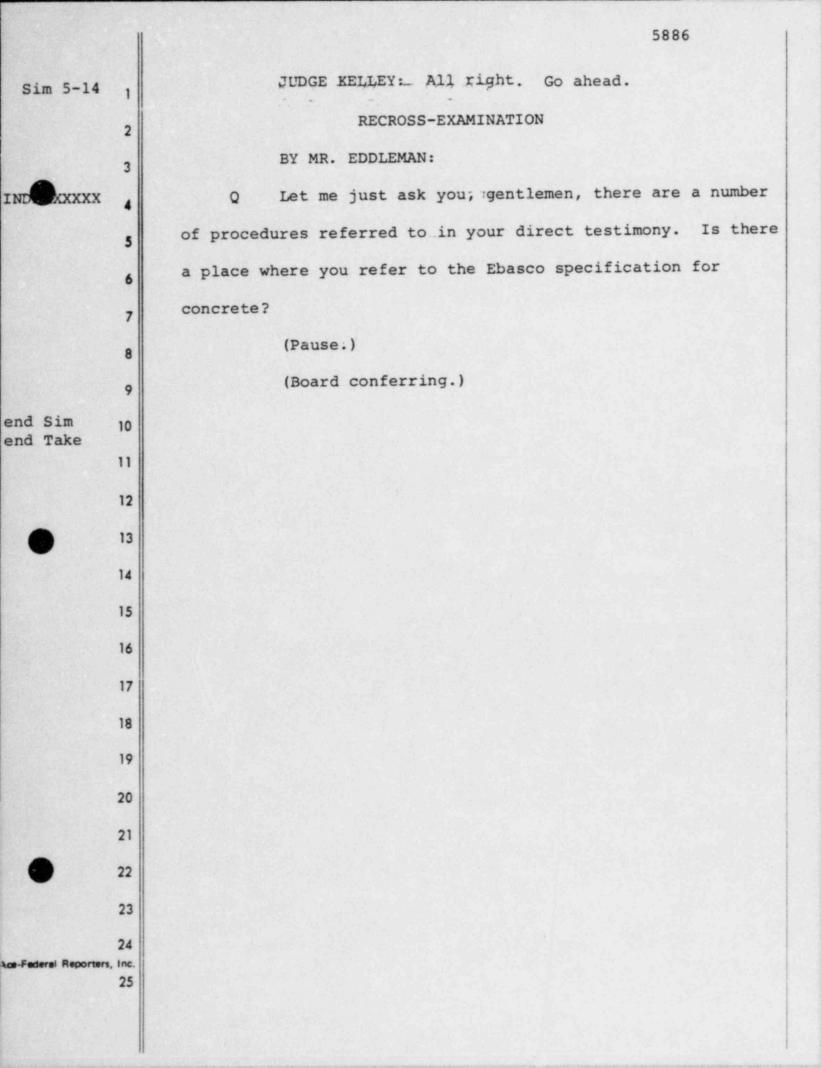
MR. EDDLEMAN: Yes. My prime criterion that I am 6 working on here is basically that I retain enough energy to 7 drive myself over to the quick medical clinic and let them 8 look at me and do a strep test if it is necessary and get on 9 home and collapse, you know. I was prepared to spend a day 10 in bed this morning. It is sort of like I have gone into 11 trip condition and been asked to override and work in a 12 limiting condition. I am doing the best I car. 13

JUDGE KELLEY: I understand.

MR. EDDLEMAN: But I am not good for a full day I don't believe.

JUDGE KELLEY: We are not proposing that. Why don't we go for 45 minutes or so with this and then take a break and maybe get a bite to eat. We are not going to take an hour for lunch, but just a short break, and then go back and go for a while and guit early certainly.

MR. EDDLEMAN: If I could, I am trying to maintain my condition and I am wearing down a little bit here, if I could just advise these gentlemen of what I am going to be starting off into and then take about five minutes.



-1-Wal	5887
1	(12:20 p.m.)
2	MR. BARTH: Your Honor, is there a question
3	pending?
4	MR. EDDLEMAN: I believe there is.
5	MR. GARNER: We do refer to EBASCO Specification
6	CH-6, on page 15, lines 4 and 5.
7	BY MR. EDDLEMAN: (Continuing)
8	Q Okay. That is in respect to weather conditions,
9	correct?
10	A (Witness Garner) It is in respect to the comments
11	made on Exhibit 11.
12	Q I don't know if there is anything further. Mr.
13	Parsons appears to be looking.
14	MR. BAXTER: I think the specification, Mr. Eddleman,
15	is referenced throughout the discussion of these pour
16	packages. Not always by the complete title, but again, the
17	word specification
18	MR. EDDLEMAN: I don't know if that is a stipulation.
19	WITNESS PARSONS: In the hierarchy of documents,
20	the specifications govern the way that we write our procedures.
21	They have to match this specification, so in essence all
22	procedures relate back to the specifications.
23	BY MR. EDDLEMAN: (Continuing)
24 ederal Reporters, Inc	All light. And the period
25	

Ace-F

6-2-Wal

5888

(Witness Parsons) That is correct. 1 A Okay. That is one of the things I want to into 2 0 3 with you gentlemen in a few minutes. Is it true then that the placement and inspection 4 and the measures to deal with hot weather or cold weather 5 and other characteristics of these placements and pouring 6 methods as are covered in the exhibits 10 through 22, would 7 in general have to be in compliance with that specification 8 CH 6, if I can just refer to it by its last few letter 9 10 numbers. That is correct, unless modified by an FCR. If 11 A they are not in compliance, it would be noted on a deficiency 12 report of one kind or another, and evaluated from that 13 14 standpoint. Q Okay. The -- I have got a nice new copy of 15 Exhibit 9 here. Do you gentlemen also have Exhibit 9? 16 We have, if you will give us a minute. Yes, we 17 A 18 have it. Now, highly qualified accoustical engineers are 19 0 at work here, I take it. Gentlemen, I just want to refer 20 to that, because I want to make sure you had it. I might 21 be asking you some questions about that after I take a minute 22 to sort of rest my voice and brain. 23 I believe you all have in your notebooks there or 24 Ace-Federal Reporters Inc. are available to you, copies of the specification, EBASCO

6-3-Wal

Ace-Federal Repo

	1	specification concrete, CAR SH CH-6, also, do you not?
	2	A That is correct.
	3	Q That is what I wanted to get set up. Those and
	4	sort of the general nature of the pour package and some
	5	specifics about that are what I would be wanting you to go
	6	into in general next. It will probably take me more than
	7	forty-five minutes to go through what I have prepared, but
	8	that is where I would want to go, and I would like to get
	9	my five minutes now, if I might.
	10	JUDGE KELLEY: Oh, I am sorry. Fine.
	11	(Short recess taken)
	12	JUDGE KELLEY: You can resume.
	13	BY MR. EDDLEMAN: (Continuing)
	14	Q Now, I know I am tired, because when I lie down
	15	I can feel the weight of my shoes, but I am doing the best
	16	I can.
	17	Gentlemen, the concrete in all the pours that are
	18	in question here would need to be within the specification,
	19	CAR SH CH 6, or some field change from it, I believe we
	20	were saying before the break.
	21	Just for reference, you have that specification
	22	with you, I think.
	23	A (Witness Kanakaris) Yes.
orters,	24	A (Witness Parsons) That is correct.
	25	Q On the cover sheet I may often ask you gentlemen
	1	

to read for me, rather than reading something myself and 1 asking if it is correct. It is simply a way to rest my voice. 2 The various revisions and date begin with the 3 original on 8/21/73. I wonder if you could just read through 4 the dates of the various revisions there. 5 All right. A 6 MR. BAXTER: Excuse me, Mr. Eddleman. Have copies 7 of this been provided to the Court Reporter, this exhibit? 8 MR. EDDLEMAN: I didn't give one to the Court 9 Reporter. I have got an extra one here. I can. 10 MR. BAXTER: My only point was if we had sufficient 11 copies to mark it for identification as an exhibit, and then 12 we wouldn't have to read it. 13 JUDGE KELLEY: That sounds like a good idea. 14 Mark it just as an exhibit. You are basically using it for 15 cross, and we don't contemplate it as an evidenciary 16 document, but if we mark it then you could refer to a column 17 of letters and then the Reporter could simply put it in the 18 transcript and we would be home free on what it says. 19 MR. EDDLEMAN: Okay. That will save me some time, 20 too. I have a single spare copy here. I believe I provided 21 individual copies to all the Board members. 22 JUDGE KELLEY: Yes, that is enough. If you could 23 give -- we will give one of ours to the Reporter. 24 Ace-Federal Reporters, Inc. Do you have an extra, or just one that you are 25

6-5-Wal

A

1

	1	using?
	2	MR. EDDLEMAN: This is an extra. You just need
	3	one?
•	4	JUDGE KELLEY: Yeah, we can get by with that,
	5	think. I will give them another one later.
	6	BY MR. EDDLEMAN: (Continuing)
	7	Q Okay, gentlemen. There are eleven revisions,
	8	correct?
	9	A That is correct.
	10	Q And those appear on the front sheet, on three
	11	more continuation sheets marked Cover Sheet page 1 of 4,
	12	Continuation sheet, page 2 of 4, continuation sheet page
•	13	of 4, and continuation sheet page 4 of 4, at the front o
	14	this specification, do they not?
	15	A Yes.
and 6. SueT fols.	16	
	17	
	18	
	19	
	20	
	21	
•	22	
	23	
	24	
e-Federal Reporters,	Inc. 25	

5891

3

f

#7-1-Sue	T	Q And for each revision, an effective date is given;
	2	is that correct?
	3	A (Witness Kanakaris) That's correct.
)	4	Q Okay. Now, so a listing of the revisions and dates
	5	can be pulled right off that by looking at the revisions and
	6	the corresponding dates, correct?
	7	A Correct.
	8	MR. BARTH: I would object on a point of order,
	9	Your Honor. I thought the Reporter was going to mark this
	10	with an exhibit number. Heavens knows what we've got now,
	11	except she is holding it in her hand.
	12	JUDGE KELLEY: Why don't we do that as a mechanical
	13	matter? This will be Eddleman Exhibit I don't know what
	14	number it would be.
	15	MR. EDDLEMAN: I think it would be 12.
	16	JUDGE KELLEY: Okay.
	17	MR. BAXTER: We cally have 9 on our list.
	18	MR. BARTH: The Staff has 9. That makes 18 between
	19	us, Mr. Baxter.
	20	(Laughter.)
	21	JUDGE KELLEY: 10?
)	22	MR. EDDLEMAN: Let me think. Yeah, I believe they
	23	are right. So, let's call it 10.
daral Bangana	24	JUDGE KELLEY: This exhibit will be marked as
deral Reporters,	25	Eddleman Exhibit 10. It's not in the record as evidence, but

Ace-Fe

#7-2-SueT	1	just marked so we can look at it for convenience and see what
	2	it says.
	3	(The above-referred to package of
•	4	documents is marked as Eddleman
INDEXXXX	5	Exhibit Number 10 for identification.)
	6	MR. EDDLEMAN: And let me try to clarify this.
	7	I do want the record to reflect some things that these gentle-
	8	men see in this exhibit as they said it governed all of this
	9	stuff. And I'm not sure how that works.
	10	JUDGE KELLEY: Well, your questions and answers will
	11	be in the
1	12	MR. EDDLEMAN: Right. So
	13	JUDGE KELLEY: record.
	14	MR. EDDLEMAN: let me just try to be clear about
	15	this. When I ask a question like it shows the dates, and they
	16	say yes
	17	JUDGE KELLEY: Yes.
	18	MR. EDDLEMAN: then it's a convenience, you don't
	19	have to go through and read all of the dates.
	20	JUDGE KELLEY: Right.
	21	MR. EDDLEMAN: But they are there. And I would, in
•	22	effect, have those dates in evidence because they said they
	23	were there. Is that
	24	JUDGE KELLEY: In effect, you do if there is no
Ace-Federal Reporters,	Inc. 25	objection to the question. That's right.
	100	objection to the question. That is right.

MR. EDDLEMAN: Okay. So that clears it up within 1 #7-3-SueT 2 my --3 JUDGE KELLEY: That's just to avoid quoting. MR. EDDLEMAN: Yes, sir. I understand. I think 4 that will make this whole process a lot more efficient. 5 BY MR. EDDLEMAN: (Continuing) 6 Gentlemen, I would like to ask you one question 7 0 about Revision 4, which appears to have two dates. Were 8 9 there two pieces of it? I don't really understand this. And you may not 10 11 know. I just want to ask you about how that worked. (Witness Kanakaris) I think the Revision 4 was 12 A perhaps a series of revisions, or proposed revisions I should 13 say, and some correspondence and discussion with CP&L and 14 Ebasco. And the revision started as shown April 17th and there 15 is another date, September 21, both in 1978. 16 And you might say it's a continuation of revisions 17 that took place in that period of time. But it's all indicated 18 19 as Revision 4. Okay. Now, the reason I wanted to inquire about 20 0 this, I think on each of these pour packages is a date of the 21 pour is shown of the thirteen packages we have in evidence; 22 23 is that right? (Witness Parsons) That's correct. 24 A Inc Are-Frderal Reporters So we could look up the dates of the pours on the 25 0

#7-4-SueT

1

2

3

4

5

6

8

18

19

20

21

22

23

24

25

packages. I believe that those two base slab pours occurred in about July or August of 1978 which is between these two dates on Revision 4.

> (Witness Garner) That is correct. A

Okay. Now, is it true that the specification Q revisions in effect on the date of a pour would generally 7 govern that pour?

> (Witness Parsons) Yes, that is correct. A

Okay. Well, this may not come up, but when I ask 9 0 you about other things in here, let me just do this as a 10 general thing, too, because I think it's written on the exhibit 11 12 in most cases.

There is a couple, or maybe more than a couple, 13 where mine shows a revision and the revision number is off the 14 side of the page. But, just -- the revisions in here are 15 marked by vertical bars and revision numbers as to the sections 16 that were revised on those dates, correct? 17

> (Witness Kanakaris) That's correct. A

So, as to the particular provisions in effect on a 0 date, if you have a revision, say, Revision 7 -- I'm just doing this as an example, but any revision number -- marked beside a provision in this specification, that means it was in effect from Revision 7 forward unless there are other revisions also marked?

Ace-Federal Reporters Inc

Is that how that works?

Yes, I believe that's the way it works. #7-5-SueT 1 A We can get some examples here. If you find any 2 0 contradictions to that later on, please let me know. 3 4 The other thing I would like to refer you to, I believe up through Revision 6 there is no listing of FCRs 5 incorporated in this, but for Revision 7 and following there 6 7 would be a listing of FCRs incorporated. 8 Is that correct? (Witness Parsons) That's correct. But it might 9 A not -- it's not necessarily significant. A specification can 10 11 be revised by what we call maintenance which is to incorporate FCRs if we have them. Or it can also be revised by any other 12 13 initiative. Now, by any other initiative, could you explain 14 0 15 that a little, sir? If the designers felt it needed to be changed, or 16 A if the field discussed it with the designers and convinced 17 them it needed to be changed, the field change request itself 18 19 is not necessary. 20 Well, now --0 A field change request is something over and above 21 A the document which we use in the field to request changes. 22 But that's not the only way a change can happen. 23 Okay. Now, another way of making changes is these 24 0 ce-Federal Reporters, Inc. formal revisions that are reflected on this document, right? 25

7-6-SueT

1

2

3

4

Yes.

A

Now, in addition to that and the FCRs, are there 0 other ways of revising the specification?

Those are the two main ways. I can't offhand A think of another -- perhaps a design change notice where the 5 initiative came from the designer and felt like he did not 6 have time to go through a formal revision to the specification 7 but felt that there was something important that needed to 8 come out there could be a design change notice, which is very 9 similar to a field change request except it gets initiated from 10 the designer end rather than the construction end. 11

Okay. Now, would a design change notice have to be 12 0 reflected on the blueprint for a pour? 13

I can't recall any design change notices that would 14 A apply to this, and they would not necessarily have to be re-15 16 flected on a blueprint.

Are you saying that in your review of the thirteen 17 Q pour packages in evidence here, to your knowledge there are 18 19 not design change notices applicable to them?

> Yes. A

> > A

Okay. Now, if there were a design change notice 0 applicable, would it normally be reflected in the pour package or noted there in some way?

-Federal Reporters inc

20

21

22

23

24

25

any particular item in the pour, it would be referenced.

(Witness Garner) Yes. If it was used to verify

#7-7-SueT	1	Q All right. Gentlemen, Revision 11 is the current
	2	revision to this document?
•	3	A (Witness Kanakaris) Yes, I believe so.
-	4	Q All right. Now, Page i which follows the cover
	5	sheet simply describes what the titles of the three sections
	6	are of this, and I don't want to make you read them but just
	7	that is shown and also the title of Addendum A, is it not?
	8	A Yes.
	9	Q Let me, if I may, because I think this is a real
	10	short line here, flip you back to Addendum A, which I believe
	11	appears virtually all the way to the back of this thing, the
	12	last few pages. There appears a Figure 1 in this Addendum A,
•	13	does there not?
	14	A (Witness Parsons) Yes.
	15	Q And it is a cross-section of the containment build-
	16	ing, as I understand it?
	17	A That's correct.
	18	Q Okay. And
	19	MR. BAXTER: I'm sorry. The containment building
	20	at Shearon Harris? Is that the question?
	21	MR. EDDLEMAN: Well, there is only one containment,
•	22	right?
	23	MR. BAXTER: I'm just asking for clarification as
Ace-Federal Reporter	24	to whether you are talking about the containment building at
	25	Shearon Harris?

7-8-SueT	1	MR. EDDLEMAN: I am.
	2	MR. BAXTER: Okay. I'm sorry. Go ahead.
-	3	BY MR. EDDLEMAN: (Continuing)
•	4	Q Gentlemen, is this a cross-section of the Unit 1
	5	containment at Harris?
	6	A (Witness Kanakaris) Yes, it is.
	7	Q And it shows on there the dimensions of the contain-
	8	ment and the dimensions of the liner plate and shows the base-
	9	mat, the containment walls and the dome, does it not?
	10	A Yes, it does.
	11	Q Okay. Now, there is also down in the lower left a
	12	valve chamber there that drops through the basemat.
•	13	A That's correct.
	14	Q Okay. I just wanted to get that in. I think it
	15	is probably the best illustration of what it is that we are
	16	talking about here that I found.
	17	Now, the division boundaries for these codes and
	18	so on that also appear back behind that Figure 1 in Addendum A,
	19	are those for the steel work rather than the concrete?
	20	A The containment building is constructed of both
	21	steel and concrete. There are certain penetrations that go
•	22	through it which are constructed of steel. There are dif-
	23	ferent sections and different codes that apply to different
	24	parts of the containment.
Federal Reporters,	25	This picture that we have, this section view of

Ace-

#7-9-SueT 1

3

4

5

6

7

8

16

21

22

ce-Federal Reporters,

the containment and the description behind it attempts to establish the boundaries so that we know which code we are 2 working to when we are working on the containment. I see. Okay. I believe that's all I have concern-0

ing Addendum A.

Now, we have pretty much an index of Section 1 then following. I want to refer you to -- I think it's Page Roman VII of that index, if I may.

JUDGE KELLEY: Could you give us a little guidance 9 as to how to get there, Mr. Eddleman? 10

11 WITNESS KANAKARIS: I don't think there are Roman Numerals, are there? 12

MR. EDDLEMAN: I'm sorry. It's probably Page 1. 13 It appears after Roman VI, and on my copy there is no page 14 number down at the bottom. 15

MR. BAXTER: The next page is 2.

MR. EDDLEMAN: Right. It says before Page 2, 17 so it probably is Page 1. Even I can figure that out. 18 19 JUDGE KELLEY: Okay. BY MR. EDDLEMAN: (Continuing) 20

Does everybody have it now? 0

> (Witness Parsons) Yes. A

Okay. Gentlemen, the specifications and standards 23 0 there, could you just read -- I know we don't necessarily have 24 inc. to read it, but I want to refer you to the short paragraph that 25

#7-10-SueT	1	appears under Item 2, specifications and standards. And it
	2	describes, does it not, what standards and American Concrete
	3	Institute Codes and other applicable standards apply for
•	4	concrete work at the Harris plant, correct?
	5	A (Witness Parsons) To the extent it is referenced
	6	herein. And by herein, I mean throughout the body of the
	7	specifications.
	8	Q This whole specification document, CH6, right?
	9	A Yes.
	10	Q Okay. Now, it refers to the date of the purchase
	11	order there. This says unless otherwise noted the documents
	12	with addenda, amendments and revisions in effect on the date
•	13	of the purchase order will apply.
	14	Do you gentlemen know what the purchase order date
	15	is for the Harris plant?
	16	A No, that's not the purchase order that we are talk
	17	ing about.
	18	Q All right.
	19	A Each one of these items represents something, or
	20	most of them represents something, that gets purchased.
	21	Aggregate, cement, containment liner plate. And on the date
•	22	that we establish the purchase order for, let's say, cement,
	23	the date of the ASTM applying to cement was in effect.
	24	Q 'Uh-huh. Now, as for tests, would you do the tests
Ace-Federal Reporters,	1nc. 25	as to the version that was in effect as of the date of the

#7-11-SueT

1

2

3

4

5

6

7

8

9

10

17

18

24

25

test where some of these are test requirements, like Cl09?

A Yes. They get evaluated. But basically we stick with the test and the testing methods +hat apply to the purchase order. Otherwise, they would have no bearing upon the cement that we were purchasing.

Q All right.

A You have to accept and reject based on what the purchase order was which in turn incorporates the relevant ASTM specification item.

Q Okay.

A And we do evaluate them. And sometimes if they don't have any relevant change or that apply to ours we may, for convenience, upgrade to another test.

14 Q All right. And that's what's referred to in the 15 last sentence there, later editions may be used by mutual 16 consent in writing between seller and owner?

A That's correct.

Q Now --

0

A Quite often, these ASTMs and the ACIs get modified. The modifications are almost editorial in nature or maybe don't even apply to the type of structure that we are building, so that the -- it would make no difference for us to go ahead and use the newer test.

Okay. Just for clarity, the seller here is Ebasco

Ace-Federal Reporters, Inc.

and the owner is CP&L?

#7-12-SueT

1

2

3

4

7

15

16

23

24

25

0

Ace-Federal Reporters

No.

A

0

All right. Please clarify.

The sellers are various sellers. The Ebasco A specification, of course, governs, tells us what are aggregate, or our cement, or our liner plate has to be tested and 5 accepted and purchased. 6

> 0 Uh-huh.

We then go out to separate suppliers. We obviously 8 A go to a guarry, not to Ebasco, to get the aggregate; and, we 9 go to a cement supplier to get the cement. We take the 10 directions that we receive from the architect engineer through 11 these specifications and incorporate that relevant portion of 12 these specifications into the purchase order from the cement 13 supplier, for instance. 14

> Yes, sir. Does that complete your answer? 0 Yes. A

Okay. As to specifications and standards for 17 0 pouring concrete, for inspecting concrete, for testing con-18 crete and so on, those are things that would be applied. I 19 mean, it doesn't make any difference who the owner and seller 20 are for purposes of the applicability of those things, does 21 22 it?

That's correct. They would be applied by the A construction forces in the field to pour the concrete.

Okay. I want to --

#7-13-SueT	1	A I would like to call your attention to one part
	2	of this specification. It's Section 1 which specifically
-	3	refers to concrete materials and mixes.
•	4	Q Uh-huh.
	5	A And there is another section that refers to the
	6	placing.
	7	Q And I believe that's Section 2?
	8	A Yes.
	9	Q Okay. I will get to that pretty soon. Now, where
	10	a date is shown for one of these items on this in this
	11	specification, pardon me, that would be the date applicable
	12	unless it was changed?
•	13	A If we are referring again back to the dates of
	14	the revisions in the front of the specification, that's in-
	15	correct.
	16	Q No, I'm not what I'm saying is, suppose it says,
	17	you know, ACI Number such and such, 450 or whatever, dated
	18	1976, is that date as shown the one in effect unless it's
	19	changed?
	20	A Glancing through here hurriedly, I don't believe
	21	any of them have dates on them.
•	22	Q Well, if they did have a date like that, would
	23	that be so? That's all I'm getting at.
e-Federal Reporters,	24	MR. BAXTER: Cbjection.
	25	BY MR. EDDLEMAN: (Continuing)

Ac

Let me refer you to Page 2, if you would look at #7-]4-SueT 1 0 ASME/ACI-359, does that have a date on it, sir? 2 3 (Witness Parsons) Yes. A Okay. Would that date be applicable unless it were 4 0 5 changed? That's correct. 6 A 7 All right. This includes --0 (Witness Kanakaris) I would like to make a cor-8 A 9 rection on that. 10 Yes, sir. 0 If there is a date shown on these specifications, 11 A then that date, or that specification as dated, is the one 12 that is applicable. And I would like to refer back to the 13 previous page, the paragraph that precedes the listing of 14 15 all the specifications, or understand it's in codes, and it says: Unless otherwise noted, the documents with addenda, 16 amendments and so on in effect at the date will apply. 17 18 The ASME-359 code that's identified here has a 19 date, and that's the one that's applicable. 20 All right, sir. Now --0 If that was changed later on, it would not 21 A 22 necessarily be applicable. Okay. The page that you read that from is Page 1, 23 0 24 I take it? ce-Federal Reporters, Inc. 25 A Yes, that's correct. e nd #7 Mary flws

1

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

25

Q Would you know by something in a pour package whether the applicable code had been changed or do you just have to check the date?

A (Witness Parsons) You would basically have to check the date.

Q All right, sir. May I refer you gentlemen toward the bottom of page 3 there. I believe down toward the bottom of that there are some standards for such things as evaluation of compression test results, specification for structural concrete for buildings, measuring, mixing and placing concrete, hot weather concreting and cold weather concreting, consolidation of concrete and reinforced concrete, are there not?

A Yes.

Q And some of those have revisions besides them. In general, I am going to take it that if there are revisions there and we can see the numbers, that, you know, we don't have to go through them. But there are some revisions besides some of those that I am referring to, are there not?

A Yes.

\_Q Now right below that there is a very short paragraph of three lines. Would you read that if you will spare my voice a little bit?

A "Any conflict betweer this specification and/or the reference codes and standards shall be immediately brought to the engineer's attention for written resolution."

24 ce-Federal Reporters, Inc.

Okay. Is the engineer there Ebasco or ---0 1 The engineer is Ebasco. A 2 Okay. Now there are more standards I believe on 0 3 page 3A that follows page 3, and then on the next page, page 4 4 there are some definitions of terms used in the specifica-5 tion. Now since there are different sections of it, let 6 me ask you if you know, do these definitions apply to the 7 whole specification or just this Section 1? 8 MR. BAXTER: Mr. Chairman, I am trying to be 9 patient, and I do recognize that some background information 10 about concrete placement is necessary for understanding what 11 is being litigated here, but I for the life of me can't 12 understand why we are exploring this design specification 13 page by page and how it is going to be tied into the pour 14 package when we get there. 15 JUDGE KELLEY: Well, having gotten into it a bit 16 maybe you could comment, Mr. Eddleman. 17 MR. EDDLEMAN: I think that much of Mr. Stokes' 18

5907

MR. EDDLEMAN: I think that much of Mr. Stokes criticism is that the packages show things that appear to be out of specification or not in compliance with the code, and he does state that he reviewed this specification among the documents he reviewed.

What I am trying to do is establish, you know, for purposes of the record what some of these specifications are that are relevant. There are some things about

Ace-Federal Reporters, Inc.

Sim 8-2

25

19

20

21

22

23

3

4

5

6

aggregate fitting in. There are things about placement and 1 consolidation, temperature and placement and so on. 2

JUDGE KELLEY: Let me ask you. We have been talking about various codes and the fact that this long document is in effect derived from these various codes. How are we going to get to the codes themselves in this case? Are they in evidence, and, if so, where? 7

MR. EDDLEMAN: I don't believe that the codes 8 themselves are in evidence. 9

JUDGE KELLEY: Okay. If they are not going to be 10 in evidence, if the contention is a certain concrete pour is 11 not consistent with some ASTM Code and we don't have the 12 codes in evidence where does that get us? 13

MR. EDDLEMAN: Well, for example, if Mr. Stokes 14 said in his affidavit, I referred to code such and such, and 15 this does not appear to be consistent with it, then I 16 presume if the applicants want to cross him about that, they 17 can pull out the code and ask him about it. 18

I just want to make sure we have nailed down what 19 the applicable codes are. 20

MR. BAXTER: I think what we are doing, Mr. Chairman, 21 by his ---22

JUDGE KELLEY: I am not at all sure that you can assume that a witness can come in here and start quoting codes if we don't have the codes in the case. I don't know

ce-Faderal Reporters

23

24

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

ce-Federal Reporters, Inc.

that that follows.

MR. EDDLEMAN: Well, I don't know enough about the law to tell you one way or another. We have had things where witnesses refer to other documents, not necessarily codes, where they didn't have to put them in evidence.

JUDGE KELLEY: Well, we had some of this in a contention, was it last week, when we got into a code having to do with fire protection and had a lot of argument back and forth about whether pieces of a code was going to get in or not and finally let it in.

But I look at these pages and pages of references to codes and that is not the kind of thing that we take official notice of, to my knowledge, and I would have thought that if you were going to make it a part of your case that the pours here where inconsistent with codes, that we would have some codes in evidence.

I am giving you a reaction.

MR. EDDLEMAN: I understand.

JUDGE KELLEY: The contention says that the pour packages are going to show that -- well, I don't want to paraphrase it.

(Pause.)

The contention says "Inspection of pour packages has shown numerous instances of improper concrete placement." It is another thing, it seems to me, to have a

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

Inc

25

ce-Federal Reporters.

contention that says the concrete placements at Shearon Harris were made under procedures that are inconsistent with nationally accepted standards, and then we would be looking at national codes and we would be seeing whether that is true or not true.

There is not a word in there about being inconsistent with codes.

MR. EDDLEMAN: Well, Judge, since the Board rewrote the contention in this case and I didn't write it, I think you may know more about what it means that I do.

JUDGE KELLEY: Well, it says what it says. It started out saying that the Danial Construction Company couldn't be trusted to make a containment. You never went anywhere with that. That just disappeared. So we dropped the Daniel Construction Company and there was a big dispute over whether you got pour package or not. We gave you pour packages and rewrote the contention to say what it says.

But originally it was going to be prove of the incompetence of Danial from what they had done at varous other sites, but we never heard anything about that, and that is why that went by the Board.

22 MR. EDDLEMAN: Well, I understand that, but ---23 JUDGE KELLEY: I still see nothing in here about 24 codes.

MR. EDDLEMAN: All right.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

19

20

21

22

23

24

25

Ace-Federal Reporters, Inc.

JUDGE KELLEY: That isn't to say that some reference to them may not be appropriate, but if the whole case now is that there is an inconsistency between what was done and what the codes say, then it is news to me, I must say, speaking for myself.

MR. EDDLEMAN: Well, Judge, let me try to explain what my understanding of it is. If you find a problem -- it seems to me that when you make one of these pours, that if it is properly done that it is in compliance with the applicable specifications, procedures and codes.

I think I am basically done with asking about these codes anyway, but I think if you say inspection of pour packages and you limit it to just saying looking at the marks on the paper and package itself without reference to the requirements for what has to be done, that it is a thing that is impossible to prove.

I mean unless the package says this is a mess, and that is not what I thought Mr. Stokes' analysis was about.

JUDGE KELLEY: Well, the objection that started all this discussion was Mr. Baxter saying that we shouldn't be going line by line through this spec document and I think the Board generally agrees with that.

I will tell you, speaking for myself, that if we get into a thesis that says that this whole case really turns on inconsistency between what was done here and national

3

4

5

21

22

23

24

Inc.

25

Ace-Federal Reporters.

Codes that aren't in evidence, that will give me a great deal 11 of difficulty. That bears on my own reaction to the last 2 20 minutes on this spec document where we were looking at all these codes and I keep wondering where are they, and as far as I know, they are not here, not in this case. Nobody has tried to introduce them. 6

MR. BAXTER: May I call the Board's attention to 7 Mr. Eddleman's response to my objection was to state that he 8 was attempting to essentially some foundation and provide 9 more information in support of Mr. Stokes' testimony. I don't 10 think that is an appropriate purpose of cross-examination 11 of this panel. We are supposed to be cross-examining on the 12 evidence applications have advanced. If Mr. Stokes didn't do 13 a good job of putting in his testimony the explanation of 14 the bases for his criticism of these packages, that is his 15 problem, but it is not the appropriate point of cross-16 examining these witnesses. 17

JUDGE KELLEY: Cross on these witnesses ought to 18 be on their testimony. That is what they are here to talk 19 20 about.

Now in light of these comments, of they have a restrictive effect on your dealing with this spec document, where would you propose to go with it?

MR. EDDLEMAN: I am not guite sure I know what you mean by restrictive effect. I guess I could go back and

ask the panel did Mr. Stokes raise some questions about say î. 2 weather conditions and size of aggregate and things like this 3 and get answer to that and then try to come back to this document and say well, doesn't it say something about those 4 5 things? That is where I think I should try to go then. But 6 they are saying basically that they have analyzed his results 7 and he is wrong. I think reference to these things might 8 establish whether they are right about that.

9 JUDGE KELLEY: We are going to have a short break 10 for lunch, not right now, necessarily, but our theory was 11 we would wait until after 1 o'clock and get served pretty 12 quick upstairs if people want to get something to eat.

Would you like to go ahead for another 15 or 20
minutes, or would you rather quit now for a break and take
20 minutes or half hour lunch break or what is your preference?

MR. EDDLEMAN: Judge, I am feeling a little bit
better now than I was at the time of the last break. So I
would rather go another 15 or 20 minutes and try to use me
while I am functional. I don't know how I will be after
lunch.

21 JUDGE KELLEY: It is 10 after 1. Why don't we 22 think about knocking off about 1:30 for a short break.

BY MR. EDDLEMAN:

23

24

Inc. 25 Q Have all of you read Mr. Stokes' affidavit in response to the summary disposition on Contention 65?

Sim 8-9	1	A (Witness Parsons) Yes, sir.
	2	A (Witness Garner) Yes, sir.
	3	A (Witness Kanakaris) Yes, sir.
	4	Q All right. And basically your testimony responds
	5	to some of his allegations about these 13 pour packages?
	6	A (Witness Parsons) Yes.
	7	A (Witness Garner) Yes.
	8	A (Witness Kanakaris) Yes.
	9	Q Does he not question, for example, temperature con-
	10	ditions in certain pours, the vibration procedures in various
	11	pours, the size of aggregate allowed in relation to some spacing
	12	requirements on those basemat pours
•	13	MR. BARTH: Could we have a reference to where these
	14	occur so we will have a record upon which we can write findings
	15	upon?
	16	JUDGE KELLEY: Off the record.
	• ,	(Discussion off the record.)
	18	JUDGE KELLEY: Go back on the record.
	19	BY MR. EDDLEMAN:
	20	Q I believe we established that your testimony is
	21	basically responding to Mr. Stokes' affidavit.
•	22	MR. BAXTER: Objection. That is a mischaracterization
	23	of their answer. It says they did respond to it. It doesn't
	24	say their testimony in its entirety is just a response to it.
Ace-Federal Reporters,	Inc. 25	MR. EDDLEMAN: I will accept that.

Sim 8-10 1 JUDGE KELLEY: All right. -BY MR. EDDLEMAN: Mr. Stokes on page 1 of his affidavit lists a 3 Q number of documents that he says he reviewed, correct? 4 5 (Pause.) Do you gentlemen have Mr. Stokes' affidavit? 6 7 (Witness Parsons) Yes, but I don't see a list of A 8 documents that he reviewed. Do you have page 1 where it has the title "Affidavit" 9 0 at the top? I think what you are looking at is my answer 10 to the motion, and Mr. Stokes' affidavit is attached behind 11 12 that. (Witness Kanakaris) Yes, I see that. 13 A (Witness Parsons) I think we are all together now. 14 A All right. Now on that page 1 which is titled 15 0 "Affidavit" at the top, he begins there a list of documents 16 17 he reviewed, does he not? 18 (Witness Garner) Yes. A Okay. And that includes the specification for 19 0 concrete that we have been talking about here, Revision No. 11, 20 21 does it not? 22 (Witness Garner) Yes. A 23 (Witness Parsons) Yes. A I don't want to go through this. We are going to 24 0 inc. ce-Federal Reporters. put the affidavit in evidence later on, but it shows on that 25

page certain other procedures, Items 2 through 8 there, and Sim 8-11 1 those I believe are procedures from the Harris plant, are 2 they not? 3 MR. BAXTER: Mr. Chairman, if we could just ask a 4 question rather than talk about what the paper says that is 5 already ---6 JUDGE KELLEY: I think it would be useful. The 7 gentlemen I think are guite familiar with the affidavit. Just 8 ask the question. 9 MR. EDDLEMAN: All right. 10 MR. BY EDDLEMAN: 11 He refers in his affidavit, for example, on page 0 12 3, and this is about in the middle of the page, a little 13 below the middle I think, to the Ebasco concrete specification 14 section 13.5, does it not? 15 (Witness Parsons) Yes. A 16 And if I can ask you, up there at the paragraph 0 17 above that he is talking about a concrete test report form 18 that he says indicates that water was added but no corrected 19 slump is indicated, correct? 20 (Witness Garner) Yes. A 21 All right. If I may refer you gentlemen over to 0 22 page 4, he in the first paragraph there talks about vibration 23 of concrete and how fast the concrete is set up, correct? 24 Ace-Federal Reporters, Inc. MR. BARTH: Your Honor, I object to this line of 25

Sim 8-12

6

10

11

Federal Bacorters

questioning. Mr. Baxter has objected and I have objected. 1 Usually the objection would be the document speaks for itself. 2 It is almost in evidence, and I will even get rid of the 3 "almost" if we can guit reading this document back and forth 4 to each other and ask a question about the contentions. 5

The applicants' witnesses addressed that pour package on page 14 of their testimony, and somehow I think we ought 7 to relate these questions to the contention and the testimony, 8 Your Honor, rather than read this piece of paper we have had 9 for some time. I apologize for my exasperation, Your Honor. JUDGE KELLEY: The point is well taken.

This document obviously is going to be in evidence, 12 and I think you can treat it for questioning purposes in that 13 fashion and just skip to the question. Otherwise, they don't 14 have to agree. For example, you can say the third sentence 15 says this and then must move on. They don't have to say 16 correct. It is correct by definition. 17

MR. EDDLEMAN: All right. Well, the reason I am 18 actually going through what this says on these various things 19 is you asked me before, Judge, you know, what I wanted to 20 go to next in the specification, and where I want to go is 21 the applicable specifications to things Mr. Stokes is talking 22 about. So that is why I wanted to go through those, but I 23 am perfectly willing to go back to this and say now as to 24 Inc hot weather or as to exposed aggregate can we look at this 25

1

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

document and find a specification for it, and I will try to show them where I think those things are.

JUDGE KELLEY: Well, haven't we established earlier that the procedures followed by Ebasco at Shearon Harris are written consistent with the spec document that we have been talking about?

MR. EDDLEMAN: That is what I understand the testimony of this panel to be.

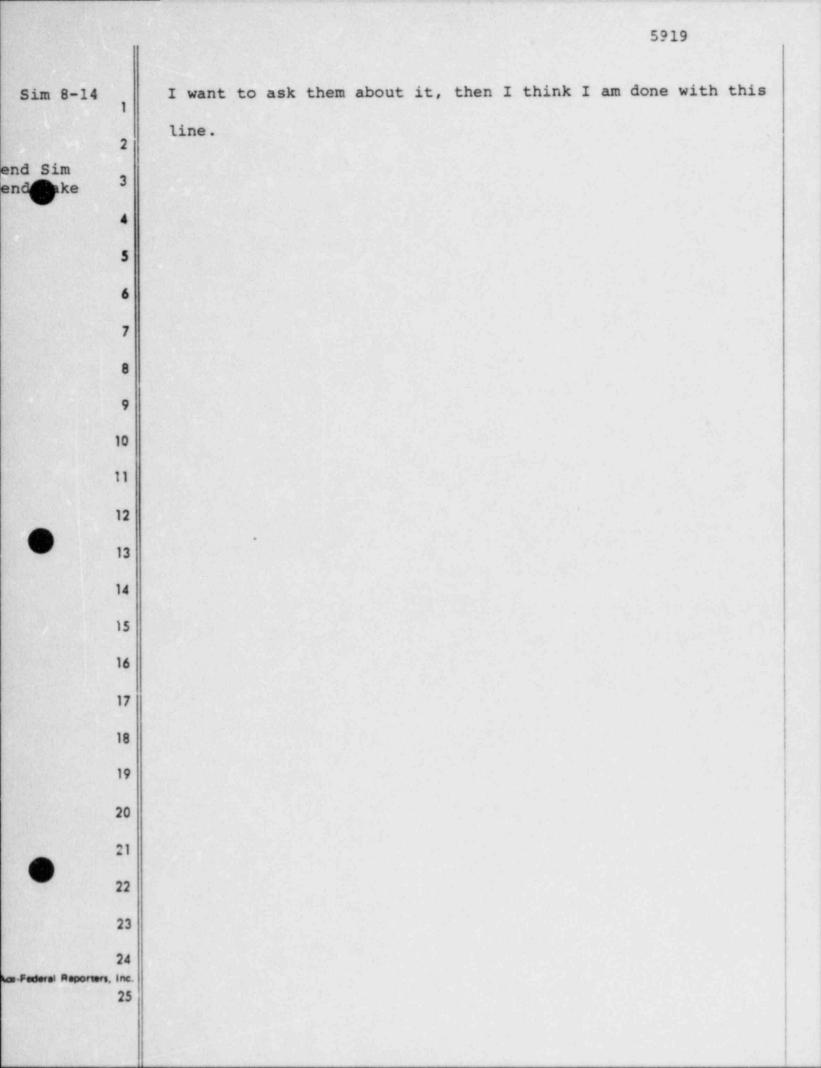
JUDGE KELLEY: Unless there is some waiver or exception granted. It is like this is the Constitution and the procedures are the statutes promulgated pursuant to the Constitution.

(The witnesses nodding affirmatively in agreement.) JUDGE KELLEY: Unless there is some ad hoc waiver for some good engineering reason. So we can stipulate to that general proposition, can't we? I think that is clear.

MR. EDDLEMAN: All right. Let me make sure I understand because we may have just gotten rid of this whole line and not have to go through almost anything else.

As I understand it, if the general procedure is the SHCH6, the Constitution as it was just referred to in this little colloquy, if it applies in general to these pours and the items that Mr. Stokes is talking about and they are at least in part of their testimony answering or giving their opinion of, and I can just cite back to this document when

derel Reporters, Inc. 25



9-1-Wal

MR. BAXTER: There is no question this is the 1 applicable specification. We talk about it in the testimony. 2 That need not be established from our standpoint. 3 JUDGE KELLEY: Mr. Barth, do you agree with that? 4 MR. BARTH: Yes, Your Honor. 5 MR. BAXTER: Mr. Chairman, I have been informed 6 by someone who checked with the dining room, while they are 7 open until two, they prefer that we come soon. 8 JUDGE KELLEY: Why don't we take a little break 9 10 here. MR. EDDLEMAN: Let me ask, is it possible, for 11 my condition I need to eat in a smoke-free environment, 12 could I get somebody to help me out by going upstairs and 13 bringing me back a sandwich or something if I pay for it? 14 JUDGE KELLEY: I guess we could work that out, 15 yes. 16 It is twenty after. Shall we try to reconvene 17 at guarter to two, if they can serve us guickly? 18 MR. BARTH: Sounds good to the Staff, Your Honor. 19 JUDGE KELLEY: All right, fine. 20 (1:25 p.m.) 21 22 23 24 -Federal Reporters Inc 25

1	AFTERNOON SESSION	(2:00 p.m.)					
2	Whareupon,						
. 3	GEORGE A. KANAKARIS,						
- 4	ROLAND M. PARSONS,						
5	and						
6	LARRY F. GARNER,						
7	resumed the witness stand as witnesses ca	alled by and on behalf					
8	of the Applicants, Carolina Power and Lig	tht Company and North					
9	Carolina Eastern Municipal Power Agency,	and having previously					
10	10 been duly sworn, were further examined and testified as						
11	follows:						
12	JUDGE KELLEY: We are back on t	the record.					
u n	Mr. Eddleman, are you ready to resume?						
14	t note, my condition						
15	batly go to around						
16	three. I am just guessing.						
17	BY MR. EDDLEMAN: (Continuing)						
18	Q I would like to try to get some	I would like to try to get some mechanical-type					
19	stuff out of the way first because I can	do it gentlemen,					
20	yesterday I believe Mr. Runkle and I distributed to you some						
21	other documents besides the EBASCO concre	other documents besides the EBASCO concrete specification					
22	we were talking about before lunch. I wo	uld just like to ask					
23	you if you have Technical Procedure TP-1	5, Revision 11?					
24 Ace-Federal Reportant, Inc.	A (Witness Parson) Yes.						
25	Q I think it might ge the most s	traigh forward thing					

9-3-Wal if somebody else has a spare, to give one of these to the 1 Reporter and mark this for identification as Eddleman 11, 2 and I request it be so marked. 3 JUDGE KELLEY: Okay. I am still shuffling for 4 TP-71? 5 my copy. MR. EDDLEMAN: TP-15, Judge. It is 000581 at 6 I guess it is about 25 pages. the top. 7 JUDGE KELLEY: All right. We have it. 8 MR. EDDLEMAN: Wait a second until I look for a 9 spare for the Reporter. 10 JUDGE KELLEY: We will pass him one for the moment. 11 (Above referenced document XX INDEX 12 is marked Eddleman Exhibit 11, 13 for Identification.) 14 BY MR. EDDLEMAN: (Continuing) 15 Gentlemen, does this appear to be the same procedure 0 16 TP-15 that is referred to in your testimony? 17 (Witness Garner) Yes, it is. A 18 19 All right, sir. I request this be marked for Q 20 identificaton as Eddleman 11. 21 JUDGE KELLEY: Very well. 22 BY MR. EDDLEMAN: (Continuing) 23 Do you have also control document Carolina Power and 24 0 Inc. Federal Reporters Light Corporate Quality Assurance Department, Engineering and 25

<ul> <li>Construction Quality Assurance/Quality Control Section, entitled: Concrete Control No. CQC-13?</li> <li>A (Witness Parsons) Yes, we have a copy of that.</li> <li>A And I believe this is dated 16 March 1981, with the Number CQC 13.</li> <li>A The copy we have is dated as you stated.</li> <li>A And numbered also that way?</li> <li>A It is numbered CQC-13.</li> <li>MR. EDDLEMAN: I request this be marked for identification as Eddleman No. 12.</li> <li>JUDGE KELLEY: Okay.</li> <li>XXX INDEX 12</li> <li>B Do you have a document with a similar overall heading, but entitled Concrete Compressive Strength Testing No. QCI-13-1.</li> <li>A (Witness Parsons) Yes, we do.</li> <li>A Also dated 16 March 19817</li> <li>A Yes.</li> <li>MR. EDDLEMAN: I request this be marked for</li> </ul>	9-4-Wa1	-		5923
<ul> <li>entitled: Concrete Control No. CQC-13?</li> <li>A (Witness Parsons) Yes, we have a copy of that.</li> <li>A And I believe this is dated 16 March 1981, with the Number CQC 13.</li> <li>A The copy we have is dated as you stated.</li> <li>A And numbered also that way?</li> <li>A It is numbered CQC-13.</li> <li>MR. EDDLEMAN: I request this be marked for identification as Eddleman No. 12.</li> <li>JUDGE KELLEY: Okay.</li> <li>XXX INDEX</li> <li>B MR. EDDLEMAN: (Continuing)</li> <li>A Do you have a document with a similar overall heading, but entitled Concrete Compressive Strength Testing No. QCI-13-1.</li> <li>A (Witness Parsons) Yes, we do.</li> <li>A Also dated 16 March 1981?</li> <li>A Yes.</li> <li>MR. EDDLEMAN: I request this be marked for</li> </ul>				
<ul> <li>A (Witness Parsons) Yes, we have a copy of that.</li> <li>A And I believe this is dated 16 March 1981, with the Number CQC 13.</li> <li>A The copy we have is dated as you stated.</li> <li>O And numbered also that way?</li> <li>A It is numbered CQC-13.</li> <li>MR. EDDLEMAN: I request this be marked for identification as Eddleman No. 12.</li> <li>JUDGE KELLEY: Okay.</li> <li>XXX INDEX 12</li> <li>I2 (Above referenced document is marked Eddleman Exhibit No. 12 for identification.)</li> <li>BY MR. EDDLEMAN: (Continuing)</li> <li>Q Do you have a document with a similar overall heading, but entitled Concrete Compressive Strength Testing No. QCI-13-1.</li> <li>A (Witness Parsons) Yes, we do.</li> <li>Q Also dated 16 March 1981?</li> <li>A Yes.</li> <li>MR. EDDLEMAN: I request this be marked for identification is the similar overall is no. QCI-13-1.</li> </ul>		1		
<ul> <li>And I believe this is dated 16 March 1981, with the Number CQC 13.</li> <li>A The copy we have is dated as you stated.</li> <li>A And numbered also that way?</li> <li>A It is numbered CQC-13.</li> <li>MR. EDDLEMAN: I request this be marked for identification as Eddleman No. 12.</li> <li>JUDGE KELLEY: Okay.</li> <li>XXX INDEX</li> <li>12 (Above referenced document is marked Eddleman Exhibit No. 12 for identification.)</li> <li>BY MR. EDDLEMAN: (Continuing)</li> <li>A Do you have a document with a similar overall heading, but entitled Concrete Compressive Strength Testing No. QCI-13-1.</li> <li>A (Witness Parsons) Yes, we do.</li> <li>A Asso dated 16 March 1981?</li> <li>A Yes.</li> <li>MR. EDDLEMAN: I request this be marked for</li> </ul>		2	entitled:	Concrete Control No. CQC-13?
<ul> <li>the Number CQC 13.</li> <li>A The copy we have is dated as you stated.</li> <li>Q And numbered also that way?</li> <li>A It is numbered CQC-13.</li> <li>MR. EDDLEMAN: I request this be marked for</li> <li>identification as Eddleman No. 12.</li> <li>JUDGE KELLEY: Okay.</li> </ul> XXX INDEX 12 <ul> <li>(Above referenced document is marked Eddleman Exhibit No. 12</li> <li>for identification.)</li> <li>BY MR. EDDLEMAN: (Continuing)</li> <li>Q Do you have a document with a similar overall heading, but entitled Concrete Compressive Strength Testing</li> <li>No. QCI-13-1.</li> <li>A (Witness Parsons) Yes, we do.</li> <li>Q Also dated 16 March 1981?</li> <li>A Yes.</li> <li>MR. EDDLEMAN: I request this be marked for</li> </ul>	-	3	A	(Witness Parsons) Yes, we have a copy of that.
<ul> <li>A The copy we have is dated as you stated.</li> <li>Q And numbered also that way?</li> <li>A It is numbered CQC-13.</li> <li>MR. EDDLEMAN: I request this be marked for</li> <li>identification as Eddleman No. 12.</li> <li>JUDGE KELLEY: Okay.</li> <li>XXX INDEX 12 <ul> <li>II</li> <li>JUDGE KELLEY: Okay.</li> </ul> </li> <li>XXX INDEX 12 <ul> <li>II</li> <li>III</li> <li>IIII</li> <li>IIII</li> <li>IIII</li> <li>IIII</li> <li>IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII</li></ul></li></ul>		4	Q	And I believe this is dated 16 March 1981, with
<ul> <li>And numbered also that way?</li> <li>A It is numbered CQC-13.</li> <li>MR. EDDLEMAN: I request this be marked for</li> <li>identification as Eddleman No. 12.</li> <li>JUDGE KELLEY: Okay.</li> <li>(Above referenced document is marked Eddleman Exhibit No. 12 for identification.)</li> <li>BY MR. EDDLEMAN: (Continuing)</li> <li>Q Do you have a document with a similar overall heading, but entitled Concrete Compressive Strength Testing</li> <li>No. QCI-13-1.</li> <li>A (Witness Parsons) Yes, we do.</li> <li>Q Also dated 16 March 1981?</li> <li>A Yes.</li> <li>MR. EDDLEMAN: I request this be marked for</li> </ul>		5	the Number	c QC 13.
A It is numbered CQC-13. MR. EDDLEMAN: I request this be marked for identification as Eddleman No. 12. JUDGE KELLEY: Okay. XXX INDEX 12 13 14 13 14 14 15 15 16 17 16 19 16 19 16 19 16 19 16 19 17 18 19 19 19 19 19 10 10 10 10 11 12 14 14 15 15 16 17 16 17 18 17 19 19 10 10 10 10 10 11 12 13 14 15 15 16 17 16 17 16 17 18 17 18 19 10 10 10 10 10 10 10 11 11 12 13 14 15 15 15 16 17 16 17 16 17 18 17 18 17 18 19 10 19 10 10 10 10 10 11 11 12 13 14 15 15 16 17 16 17 16 17 17 18 17 18 19 19 19 10 10 10 10 10 10 10 10 10 10		6	A	The copy we have is dated as you stated.
<ul> <li>MR. EDDLEMAN: I request this be marked for</li> <li>identification as Eddleman No. 12.</li> <li>JUDGE KELLEY: Okay.</li> <li>XXX INDEX</li> <li>12 <ul> <li>(Above referenced document is marked Eddleman Exhibit No. 12</li> <li>for identification.)</li> </ul> </li> <li>15 <ul> <li>BY MR. EDDLEMAN: (Continuing)</li> <li>Q Do you have a document with a similar overall</li> <li>heading, but entitled Concrete Compressive Strength Testing</li> <li>No. QCI-13-1.</li> <li>A (Witness Parsons) Yes, we do.</li> <li>Q Also dated 16 March 1981?</li> <li>A Yes.</li> <li>MR. EDDLEMAN: I request this be marked for</li> </ul> </li> </ul>		7	Q	And numbered also that way?
<ul> <li>identification as Eddleman No. 12.</li> <li>JUDGE KELLEY: Okay.</li> <li>(Above referenced document is marked Eddleman Exhibit No. 12 for identification.)</li> <li>BY MR. EDDLEMAN: (Continuing)</li> <li>Q Do you have a document with a similar overall heading, but entitled Concrete Compressive Strength Testing</li> <li>No. QCI-13-1.</li> <li>A (Witness Parsons) Yes, we do.</li> <li>Q Also dated 16 March 1981?</li> <li>A Yes.</li> <li>MR. EDDLEMAN: I request this be marked for</li> </ul>		8	A	It is numbered CQC-13.
11       JUDGE KELLEY: Okay.         XXX INDEX       12         13       (Above referenced document is marked Eddleman Exhibit No. 12 for identification.)         14       for identification.)         15       BY MR. EDDLEMAN: (Continuing)         16       Q Do you have a document with a similar overall         17       heading, but entitled Concrete Compressive Strength Testing         18       No. QCI-13-1.         19       A (Witness Parsons) Yes, we do.         20       Q Also dated 16 March 1981?         21       A Yes.         22       MR. EDDLEMAN: I request this be marked for		9		MR. EDDLEMAN: I request this be marked for
XXX INDEX 12 13 14 14 14 14 14 14 15 15 16 17 16 17 16 17 18 17 19 18 19 19 10 10 10 11 17 18 17 19 10 10 10 10 10 11 12 12 12 13 14 15 15 16 17 16 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 18 17 18 18 17 18 19 18 19 18 19 18 19 18 19 18 19 19 19 19 19 10 10 10 10 10 10 10 10 10 10		10	identific	ation as Eddleman No. 12.
<ul> <li>marked Eddleman Exhibit No. 12 for identification.)</li> <li>BY MR. EDDLEMAN: (Continuing)</li> <li>Q Do you have a document with a similar overall</li> <li>heading, but entitled Concrete Compressive Strength Testing</li> <li>No. QCI-13-1.</li> <li>A (Witness Parsons) Yes, we do.</li> <li>Q Also dated 16 March 1981?</li> <li>A Yes.</li> <li>MR. EDDLEMAN: I request this be marked for</li> </ul>		11		JUDGE KELLEY: Okay.
for identification.) 14 14 15 15 16 17 16 17 18 19 18 19 19 19 19 19 19 19 19 19 19	XXX INDEX	12		(Above referenced document is
<ul> <li>BY MR. EDDLEMAN: (Continuing)</li> <li>Q Do you have a document with a similar overall</li> <li>heading, but entitled Concrete Compressive Strength Testing</li> <li>No. QCI-13-1.</li> <li>A (Witness Parsons) Yes, we do.</li> <li>Q Also dated 16 March 1981?</li> <li>A Yes.</li> <li>MR. EDDLEMAN: I request this be marked for</li> </ul>	•	13		marked Eddleman Exhibit No. 12
<ul> <li>16 Q Do you have a document with a similar overall</li> <li>17 heading, but entitled Concrete Compressive Strength Testing</li> <li>18 No. QCI-13-1.</li> <li>19 A (Witness Parsons) Yes, we do.</li> <li>20 Q Also dated 16 March 1981?</li> <li>21 A Yes.</li> <li>22 MR. EDDLEMAN: I request this be marked for</li> </ul>		14		for identification.)
<ul> <li>heading, but entitled Concrete Compressive Strength Testing</li> <li>No. QCI-13-1.</li> <li>A (Witness Parsons) Yes, we do.</li> <li>Q Also dated 16 March 1981?</li> <li>A Yes.</li> <li>MR. EDDLEMAN: I request this be marked for</li> </ul>		15		BY MR. EDDLEMAN: (Continuing)
<ul> <li>No. QCI-13-1.</li> <li>A (Witness Parsons) Yes, we do.</li> <li>Q Also dated 16 March 1981?</li> <li>A Yes.</li> <li>A Yes.</li> <li>MR. EDDLEMAN: I request this be marked for</li> </ul>		16	Q	Do you have a document with a similar overall
19       A       (Witness Parsons) Yes, we do.         20       Q       Also dated 16 March 1981?         21       A       Yes.         21       A       Yes.         22       MR. EDDLEMAN: I request this be marked for		17	heading,	but entitled Concrete Compressive Strength Testing
20 Q Also dated 16 March 1981? 21 A Yes. 22 MR. EDDLEMAN: I request this be marked for		18	No. QCI-1	3-1.
21     A     Yes.       22     MR. EDDLEMAN: I request this be marked for		19	A	(Witness Parsons) Yes, we do.
• 22 MR. EDDLEMAN: I request this be marked for		20	Q	Also dated 16 March 1981?
		21	A	Yes.
in the states of Teleforman 12	•	22		MR. EDDLEMAN: I request this be marked for
23 Identification as Eddleman 15.		23	identific	cation as Eddleman 13.
JUDGE KELLEY: Very well.		24		JUDGE KELLEY: Very well.
Ace-Federal Reporters, Inc. 25 (Above referenced document is	Ace-Federal Reporters			(Above referenced document is
				marked Eddleman Exhibit No. 13

		5924
9-15-Wal		
XX INDEX	1	for Identification)
	2	MR. EDDLEMAN: A similar document, entitled:
•	3	Batch Plant Inspection, QCI-13-2, issued March 16, 1981.
	4	A (Witness Parsons) Yes, we have that one also.
	5	MR. EDDLEMAN: I request this be marked for
	6	identification as Eddleman 14.
	7	JUDGE KELLEY: Yes.
XX INDEX	8	(Above referred to document
	9	is marked Eddleman Exhibit 14
	10	for identification.)
	11	MR. EDDLEMAN: A controlled document, similar
	12	cover, entitled Sieve Analysis of Fine and Coarse Aggregate
•	13	No. QCI-13-5, issue date 16 March 1981.
	14	A (Witness Parsons) Yes, we have that one also.
	15	MR. EDDLEMAN: I request this be marked for
	16	identification as Eddleman 15.
	17	JUDGE KELLEY: Yes.
XX INDEX	18	(Above referred to document
•	19	is marked Eddleman Exhibit 15
	20	for Identification.)
	21	MR. EDDLEMAN: Carolina Power and Light, Harris
	22	Plant Work Procedure WP-4, Revision 10, entitled Concrete
	23	Production and Delivery?
	24	(Witness Parsons) We have that one also.
Ace-Federal Reporter	1.1	MR. EDDLEMAN: I request this be marked for
	25	

		5925
9-;6-Wal		
	1	identification as Eddleman 16?
	2	JUDGE KELLEY: Yes.
XXONDEX	3	(Above referred to document is
•	4	marked Eddleman Exhibit 16 for
	5	Identification.)
	6	MR. EDDLEMAN: And finally, a document dated May 25,
	7	1984, Before the Atomic Safety and Licensing Board,
	8	Applicant Supplemental Response to Wells Eddleman's request
	9	for production of documents, Contention 65. Do you have that?
	10	A (Witness Parsons) Yes, dated May 25, 1984.
	11	MR. EDDLEMAN: I request this be marked for
	12	identification as Eddleman 17.
	13	JUDGE KELLEY: Very well.
XX INDEX	14	(Above referred to document is
	15	marked Eddleman Exhibit 17 for
	16	Identification.)
	17	BY MR. EDDLEMAN: (Continuing)
	18	Q I believe your testimony can speak for itself as
	19	to the procedures that are referenced. I don't want to take
	20	your time or my voice to go through that with you. But
-	21	I will just ask you, to your knowledge, do these appear to
•	22	be copies of the applicable documents, current revisions, for
	23	the Harris plant, with the exception of Eddleman 17, the
	24	response on production of documents?
Ace-Federal Reporters,	Inc. 25	A (Witness Garner) Yes, they are.

9-7-Wal

Ace-Federal Reporte

1	Q Gentlemen, I would like now to refer you to first
2	Attachment 4, to your joint testimony, which I believe is the
3	sample concrete placement report form, do you have that?
4	A (Witness Parsons) Yes.
5	Q Now, I also would like to be referring you simultane-
6	ously to that same form this is the form that is in the
7	front of these concrete pour package documents typically,
8	is it not?
9	A That is correct.
10	Q So, I would like to refer you simultaneously if you
11	can set this up to the front pages entitled Concrete Placement
12	Report, from what I believe are Applicants Exhibits 10 and 11.
13	Number 10 is the pour number or placement No. 1CBXW219001,
14	and the next one I believe is No. 11, Placement No. 1CBXW242001,
15	Do you gentlemen have those?
16	A Yes.
17	Q All right. What I want to do is try to ask some
18	basic questions about these, just the way the forms are set
19	up and use the two forms from the actual placements that I
20	referred to as examples.
21	The Attachment 4 is Revision 9 of this form, is it
22	not?
23	A That is correct. That is the current revision.
24	Q Okay. And on the 219001, Exhibit 10 of Applicants,
rs, Inc. 25	that is Revision 1, and on 242001, Applicants 11, that is

2

1 Revision	4,	is	it	not?
------------	----	----	----	------

A That is correct.

Okay. Now, on all three of these, basically the 3 Q so-called top third is the pre-checkout data by placing 4 organization coming down from the top, indicated by an arrow, 5 or two arrows, with the pre-checkout date over on the left? 6 That is correct. This form is intended to follow 7 A a concrete placement clear through from the beginning through 8 the -- where they establish the pre-checkcut data, through 9 the pre-placement checkout, and then post-placement afterwards. 10 All right. Now, the pre-checkout part is what we 11 0 have been calling the top third; that is, above the first 12 double line across the form? 13 That is correct. 14 A And that would be signed off, for example, on 219001, 15 0 Ken Ford signed off and dated that, correct? 16 Yes. This just serves as a method of communicating 17 A to the people in the field. Now, remember, this stays out 18 in the field, in or adjacent to the placement, until the 19 placement is completed. 20 The top third stays out in the field, and that 21 communicates to the construction people and everybody else 22 involved in the forms, what the basic parameters of that 23 Flacement are going to be. Which drawing applies. They 24 determine at that time what -- from the drawings and from the

Ace-Federal Reporters, Inc. 25 9-9-Wal

1	specification what kind of finish, what kind of screening
2	is going to be required, and just place that out in the field
3	as the first step in setting up for a concrete placement.
4	Q Okay. So, sort of the basic data about what is
5	required for the placement and where it is located, and
6	specifications for transporting placing, vibration, finishing,
7	and curing, special weather conditions and so on, design
8	strength, are on this part of the form.
9	A Yes. That is anticipated special weather precautions
10	in the event we have some indications that the weather report
11	may bring about something that we have to plan especially
12	for.
• 13	Q Right. Now, those sort of things might be hot or
14	cold weather, for example?
15	A That is correct.
15	Q Okay. And the specifications about hot and cold
17	weather are contained in the EBASCO concrete specification
18	among other places, are they not?
19	A (Witness Garner) That is correct.
20	Q Okay. One little difference I notice here on the
21	forms for Exhibit 10 and 11, Applicants Exhibits 10 and 11,
22	it says anticipated special weather precautions; on the
23	
24 Ace-Federal Reporters, Inc.	And then it has another blick beside that. Would
25	the precautions go in there on a more current

9-10-Wal

1

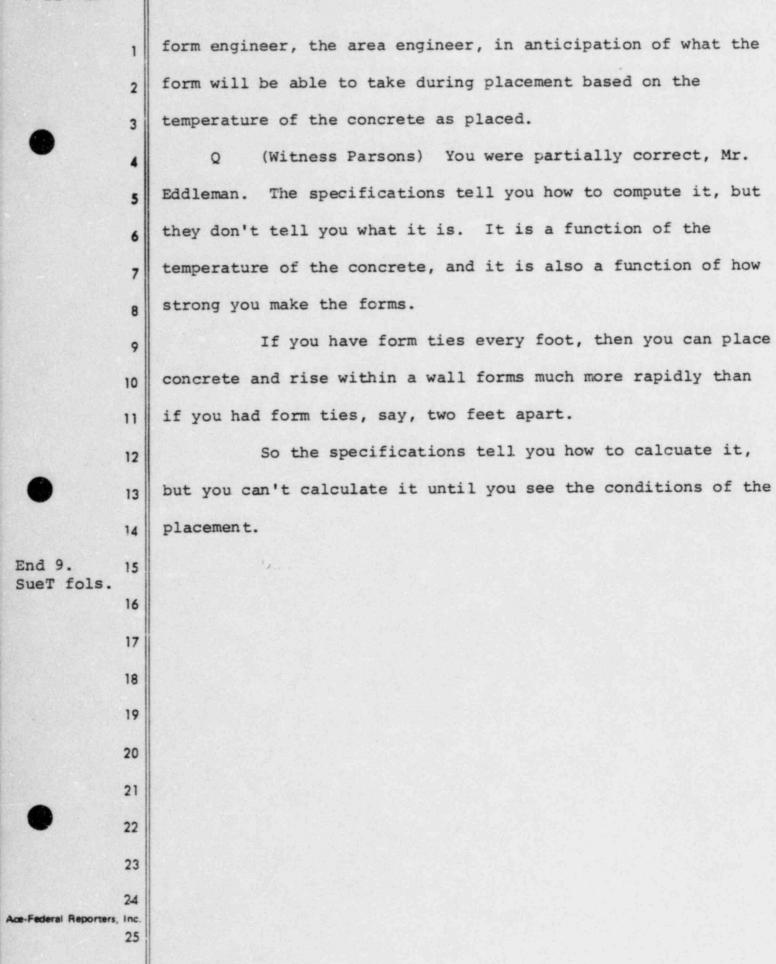
25

1	A The precautions would go under anticipated weather
2	conditions.
3	Q Okay. Now, though the difference I notice there
• •	is to the right of the weather conditions block on Attachment
5	4, you have got service condition protection. I don't see
6	that kind of information requested on the two exhibits that
7	I am referring you to, the placement reports
8	A (Witness Parsons) No. That is an enhancement to
9	we see the start has always here anallable. We falt
10	that the form would be more useful to the field if we
11	incorporated it onto this revision so they would have it
12	
13	
14	
15	
	a i i i i i i i i i i i i i i i i i i i
16	
17	a to this and has appeared to just put that
18	
19	
20	A That is correct.
21	Q Rate of rise is also covered by the applicable
22	specifications and procedures , correct?
23	A (Witness Garner) No. The rate of rise is something
24	
Ace-Federal Reporters, Inc.	

5929

it is being placed. That determination is brought about by the

9-11-Wal



#10-1-SueT	1	Q Let me just ask you, Mr. Garner, as to the tempera-
	2	ture of concrete, you are talking about the temperature of the
8	3	concrete itself, are you not, not the temperature of the air
-	4	around it?
	5	A (Witness Garner) The temperature of the concrete
	6	itself as it's placed.
	7	Q The concrete that is being poured in?
	8	A That's correct.
	9	Q Okay. Let me just try to if you gentlemen will
	10	bear with me a minute I wanted to check against some rate
	11	of rise information that I believe was in the specification
	12	which Mr. Parsons just mentioned.
•	13	(Mr. Eddleman is looking through documents.)
	14	I don't seem to be able to find that readily.
	15	Maybe I can come back to it when I find it. It may be
	16	Tuesday.
	17	The comments and clarifications of proposed methods
	18	section, would that be where you would note, for example, not
	19	just general comments but also differences from the applicable
	20	procedures or specifications?
	21	A (Witness Parsons) I don't believe you would
•	22	normally in a precheck-out data include that kind of thing.
	23	If there was any differences from the governing specifications
Ace-Federal Reporters,	24	or something, it would be much more formal than just an entry
Ace-recerar Reporters,	25	in this.

-----

#10-2-SueT 1

2

3

4

5

6

7

8

9

21

22

24

25

-Federal Reporte

Q Okay. And by more formal, do you mean something else that would be included in the pour package?

It would be a field change request or something like A that. It's not -- it wouldn't necessarily be in the pour package, but it would be something everybody would be aware of.

Okay. 0

Just as we do not include drawings in the pour A package, for instance. And a field change request would be a modification to a drawing or spec.

All right. Now, the middle section, that is between 10 0 the first double line and the second double line down the 11 Attachment 4, or these other concrete placement report sheets, 12 that's what is checked out on preplacement, correct? 13

MR. BARTH: I object to the guestion. We are doing 14 nothing except what we did this morning in reading this thing 15 down line by line. It says preplacement check-out. It's 16 Exhibit 4 to the Applicants' testimony which is already in 17 18 evidence.

JUDGE KELLEY: Is that introductory to a question, 19 20 Mr. Eddleman?

MR. EDDLEMAN: What I want to ask him about -- let me -- I mean, I think it's self-evident from the form, and the form is in evidence is the answer to that. 23

JUDGE KELLEY: All right.

MR. EDDLEMAN: But let me ask him the question I am

#10-3-SueT

1

2

3

4

5

6

7

8

9

10

14

15

16

24

trying to get to.

BY MR. EDDLEMAN: (Continuing)

Q We have some kind of lined out sections on that part of Attachment 4. By lined out, I mean with kind of a 45 degree angle hatching in the spaces so it really isn't a blank there, it's just hatching.

And that sort of setup does not appear on the placement report from Exhibit 10, does it? Applicants' Exhibit 10, I mean.

A (Witness Garner) That's correct.

11 Q Now, has there been a change that basically removes 12 QC or construction inspection or QA from looking at the areas 13 that are hatched out on this form, Attachment 4, I mean?

A Yes. These are characteristics about the placement where the QA of a surveillance organization, are not required to have sign-off on as they perform a surveillance activity.

As when the form was originally used, there was a spot for the quality assurance sign-off. But after revision of the form and revision of procedures and implementation of the quality control program, they elected not to have a signoff this concrete placement report. And so those hatch lines indicate the areas where they are not required to give signatures.

Q Okay. Well, now you spoke as to QA. What about QC, because they appear to be two different things on the

ca-Federal Reporters, Inc. 25 #10-4-SueT1

2

3

4

5

6

7

8

13

23

24

inc

25

Ace-Federal Reporters

concrete placement report from Applicants' Exhibit 10?

A The QC still has responsibility for some sign-offs in the placement. They have some quality control functions where they actually perform the inspection such as the cadwelds, such as the seismic welding. These are their inspection activities. So, they will have a sign-off slot on the card.

QA, as a surveillance activity, will not have a sign-off on the card.

9 Q Uh-huh. Now, on the Attachment 4, you have 10 construction inspection sign-off which does not appear at least 11 on Exhibit 10, correct? Applicants' 10, that concrete place-12 ment report.

A That is correct.

14 Q Okay. Now, does that mean this has been really 15 changed over from QA checking it to CI checking it? Is that 16 what has happened here?

A No. CI has always checked these activities. Originally, it was called a quality control function. But to designate that these functions specifically belong to CI, as
being their part of the quality control inspection, we changed
the form to say construction inspection which designates the
construction inspection unit as the inspection.

Q So, is it then generally true that where the title "Quality Control" on this preplacement check-out form on any of these pour packages appears, that that's really construction #10-5-SueT 1

2

3

4

5

6

7

8

9

10

14

15

18

24

25

inspection just appearing under the name of quality control?

A That will be the case on the earlier cards and the one in question, on 219001. On the Revision 9 of the form, which is our Exhibit 4, the quality control is the QC organization and the construction inspection is the CI organization.

Q Uh-huh. Okay. Now, during the time when the pours in question in these thirteen pour packages that we are dealing with under this contention were happening, was CI under the same organization as was responsible for engineering and pouring the concrete?

A Early on in the program, the construction inspection group was responsible directly to the senior resident engineer who reported to the project general manager.

Q That's Mr. Parsons, the general manager?
 A That used to be his title.

16 Q Well, I mean during the period these pours went in, 17 that was his title. Was it or wasn't it?

Maybe Mr. Parsons could tell me.

19 A (Witness Parsons) Technically, it was site manager,
20 but we are saying the same thing.

21 Q Okay. You are saying, Mr. Garner, that they reported 22 up to the -- what is it, senior resident engineer who then 23 reported to Mr. Parsons?

Ace-Federal Reporters, Inc.

A (Witness Garner) That's correct.

Q Okay. And how long did that continue, Mr. Garner?

#10-6-SueT

1

2

3

4

8

9

When did that stop?

I don't know the exact date. But we continued to A report to Mr. Parsons, being a construction inspection subunit under his organization.

(Witness Parsons) The construction inspection unit 5 has reported to me from the beginning of the job up to now. 6 7 My title has changed somewhat.

> Okay. Does that complete the answers? 0

(Witness Garner) Yes, it does. A

Okay. Gentlemen, on these check-out forms, would --10 0 I mean, on the concrete placement report itself, the front 11 sheet, if an inspector found a problem would they note it 12 there or would they note it in something else that would appear 13 later on in the package? 14

They would note it, if you are talking about con-15 A struction inspection, they would note it on the applicable 16 inspection report that they were using to document that in-17 18 spection.

And that would be another report, not this sheet; 19 0 20 is that right?

> That's correct. A

Okay. Now, are those other reports of their in-0 spections required to be included in these pour packages? 23

Ace-Federal Reporte

21

22

24

25

A

inspection of the embedded items that are contained within

If they are reports that have to do with the

#10-7-SueT1

2

3

7

8

this boundary of the pour area and required by procedures, they should be as part of the pour package if that particular inspection was required.

Q Uh-huh. Well, now on one of these forms is there a way to tell which inspections are required and which are not?

I mean, is it only the ones that are kind of crosshatched out that are not required, or does that vary?

9 A (Witness Parsons) It would vary. If you look at
10 Exhibit 4, or I mean Attachment 4, there is some down toward
11 the bottom, electrical, cadwelds, code welding. Some of those
12 things would only be included if the drawings, for instance,
13 indicated that there were cadwelds in that placement.

14

18

19

20

21

22

23

24

Inc. 25

-Federal Reporters,

Q Uh-huh.

15 A If the drawings indicated there was a piece of 16 embedded pipe which was also code pipe, then it would be re-17 guired that that be inspected.

Q And --

A So, this is meant to be a fairly comprehensive checklist and a memory-jogger that would trigger an inspection of any of those things were they in there. So, they have to make a conscious decision by looking at the drawings that they are not in there, in which case the inspectors and the engineers write it non-applicable and do not have to make an inspection obviously if there is nothing there.

#10-8-SueT

1

2

3

4

5

6

7

Q Okay. And that not-applicable appears on these things as NA or N/A, just as a matter of clarification? A That's correct.

Q Okay. In the -- if the inspection is required --I just want to make sure I've got this right, if the inspection is required then the applicable inspection form would be attached as part of the powr package?

8 A (Witness Garner) No, that's not correct. The 9 construction inspection civil items would be attached as part 10 of the pour package. Some of the other items that require in-11 spection by other groups would not necessarily be in the pour 12 package but would be sent to permanent records by means of 13 their procedures.

14 Q All right. Now, let me see if I can clarify this. 15 Are the civil items that you are talking about there, would 16 those include all of the concrete placement and testing pro-17 cedures?

18 Would those all be civil items, as you described 19 them?

A Yes.

Q All right, sir.

A (Witness Parsons) I may be able to add a little bit more to that. Something like code welding or cadwelding or electrical gets filed with the system that it's applicable to, not necessarily the placement. It's more logical to keep

Ace-Federal Reporters, Inc.

20

21

22

23

24

#10-9-SueT 1

2

3

4

5

the documentation and the inspection records associated with the run of pipe that may pass through a placement in with the rest of the documentation for that piece of pipe, because they come together at hydro and do not necessarily have a real relevant attachment to the placement itself.

We have this as a check on the concrete placement, preplacement check-out to make sure that somebody doesn't inadvertently cover up a piece of code piping prior to its being inspected. So, the signature here would indicate that, yes, it has been inspected but the documentation associated with it would be over in the mechanical files.

12 Q All right. And to find out which pipes or rebars 13 or whatever went through one of these pours, you would have to 14 look back to the blueprints rather than what is in the package; 15 is that right?

16

23

Ace-Federal Reporter

A That's right.

Q All right, sir. If I might refer you gentlemen to the QA-24 form that appears at the back of Applicants' Exhibit 19 10, that's the XW219001, to quote the last few digits of the number, now this form indicates various data on the samples of concrete taken from this pour, I take it? That's how this is set up.

A (Witness Kanakaris) That's correct.

Q Okay. Now, the applicable procedures for all of
this would be explained in the concrete specification, would

E10-10-SueT 1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

19

20

21

22

23

24

25

A

## they not?

A (Witness Parsons) No. The concrete specification again, as we said earlier, might be compared to the constitution. The procedures that we write that show how we implement the requirements of the specification would detail the applicable testing frequencies and procedures, and they would be the working document at the site.

Q Okay. Let me try to refer you -- unfortunately I haven't got this thing clear enough in my mind.

For example, if we could refer to, I think it's Page 21 of Section 1 of the CH6 concrete specification --

A I'm sorry. Could you repeat that, sir?

Q Sure. In Section 1, Page 21, as I've got it in my copy here, of the Ebasco Concrete Specification CARSHCH-6, which I believe is Eddleman Exhibit 10 --

A I've got it.

Q Okay. This refers to sampling and testing numbers
of test cylinders, for example, in the middle of the page.

A That's correct.

Q Okay. And where it makes a specification like this, it is, as you said, it's the constitution and the procedures have to implement what it says or give a reason for varying from it?

Ace-Federal Reporters, Inc.

has to implement what the specifications say and cannot be

I would take it a little stronger than that. It

#10-11-SueT

2

3

8

21

22

23

24

25

-Federal Reporters.

engineers.

varied unless we have got special permission from the engineers in the form of a field change request or revision to this basic document.

Q Okay. Now, the engineer, does that mean just
Ebasco or does it also mean CP&L or Daniel's field engineers?
A That means Ebasco. The administrative details of
making the change also includes approval of CP&L. CP&L

9 Q All right. Now, this QA-24 sheet, it also includes 10 the test cylinder strength data for the dates as specified 11 in this specification, does it not?

A The QA-24 shows the test results that were taken at the frequency spelled out by the specification and the procedures, if that was the question.

15 Q Yes, sir. That's what I meant to ask you. You 16 have answered it.

Now, as to evaluation of strength tests, it
specifies down in Paragraph .5 at the bottom of that Page 21
of the Ebasco specification for concrete, Eddleman 10, two
standards for considering strength of concrete satisfactorily.

Let me ask you if you will spare my voice by reading them. They are only two lines long each.

A No individual strength test should fall below more than 500 psi below the required class strength at 28 days. And the second test is that the average of all sets of

preconsecutive strength test results equal or exceed the #10-12-SueT 1 required class strength at 28 days. 2 And by sets, where it refers to the average of 3 all sets that means the consecutive series of tests that we 4 take, not the individual cylinders within one set. 5 Okay. Now, a test result, is that a result on 6 0 two cylinders typically? Is that how that works? 7 A We break one --8 It might clarify this if you would look over on the 9 0 10 top of Page 22. MR. BAXTER: Page 10 of the direct testimony would 11 12 help, too. MR. EDDLEMAN: I don't think what is laid out here 13 quite gets at what I am asking about, although it does 14 certainly relate to this part of the testimony. 15 BY MR. EDDLEMAN: (Continuing) 16 Mr. Parsons, were you going to make some further 17 0 18 answer there? Yes. We typically take four cylinders. We break 19 A one at 7 days to get an early indication of the strength. We 20 break two at 28 days and reserve one for later investigation if 21 22 it has to be made. Q All right, sir. Now, let me refer you to -- over 23 on Page 22, just following that same paragraph, 13.5 of the 24 Ace-Federal Reports Ebasco specification concrete for evaluation of strength tests, 25

	5943
#10-13-SueT	it says: Each 28 day strength test result will be the
2	average of two cylinders from the same sample.
3	Correct?
• 4	JUDGE KELLEY: Did we mark this particular one as
5	an exhibit?
6	MR. EDDLEMAN: I think it is already marked.
7	JUDGE KELLEY: Okay. Beyond that, let me just ask
8	a question. Does any party object to putting this particular
9	document into evidence?
10	MR. BAXTER: We have no objection.
10	
	JUDGE KELLEY: Staff?
12	MR. BARTH: No objection, Your Honor.
13	JUDGE KELLEY: Since it is being referred to from
14	time to time, and it has virtually been stipulated to, why
15	don't we put it in and then it will cut down on the quoting.
16	MR. EDDLEMAN: All right. This is Eddleman 10,
17	correct?
18	JUDGE KELLEY: Right. And it's admitted into
19	evidence. I assume you would rather have it in, right?
20	MR. EDDLEMAN: Yes, sir.
21	JUDGE KELLEY: Okay. So, it's in.
22	(The document previously marked
23	as Eddleman Exhibit Number 10 for
24	identification is received in
Ace-Federal Reporters, Inc.	
INDEXXXXXX <sup>25</sup>	evidence.)

Statement and

#10-14-SueT 1

BY MR. EDDLEMAN: (Continuing)

2 All right. Now, what I wanted to ask you about 0 3 that, Mr. Parsons, you are talking about all sets of three consecutive test results as part of the evaluation criteria, 4 5 when you talk about a strength test result on the 28 day 6 samples, that's the average of two cylinders from the same 7 sample; is that correct? 8 (Witness Garner) That's correct. A 9 All right. Now, so then you take three consecutive 0 10 results, that is three consecutive sets of two cylinders, that 11 is what that average in Item B at the bottom of Page 21 under 12 evaluation of strength test is talking about? 13 A (Witness Parsons) I believe I -- I'm not sure I 14 totally follow you. 15 Say it one more time. 16 Okay. Let me -- what I think I caught on was that 0 17 a strength test result is the average of two of those cylinders 18 at the 28 day mark? 19 A Right. 20 Two of their strengths? 0 21 A Right. 22 Okay. Now --0 23 And they --A 24 Go ahead, sir. 0 -Federal Reporters, Inc 25 (Witness Garner) And each individual 28 day test A

 -	-		-		
	n.,	- 1	- Mail 10	1	eT

1

2

3

4

51

6

7

8

9

10

11

13

14

15

16

17

18

19

20

21

22

23

24

inc. 25 has to be within five percent of their average.

Now, by their average does it mean the average of 0 the two?

> That's correct. A

All right, sir. Now, as to the average of three 0 consecutive sets of results, each set would be three sets of those two? Two cylinders in a set, is that what that means? That's correct. A

Okay. So, for example, if I'm on one of these QC --0 I mean, QA-24 concrete test report forms that appear in these pour packages, I can look at the test cylinder strength results and there will be two of them on day 28 if you are meeting the 12 requirements, right?

> (Witness Parsons) That's correct. A

end #10 Mary flws

Ace-Federal Reporters,

Sim 11-1 Okay. And then I would average those, and the Q 1 average of each set of two from the same set of samples is 2 a set of results. And then you just add up three consecutive 3 averages and that is what this set of three consecutive strength 4 test results in Item 13.5B in the specification is, is it not? 5 (Witness Garner) No, I do not think that is A 6 correct. 7 Will you please explain? I don't want to confuse 0 8 you and I don't want to get confused either. 9 Take the two 28-day breaks and average those results. A 10 The strength of each individual cylinder that is tested has 11 to be within five percent of that average. 12 Right. 0 13 When we get to consecutive sets of a particular mix, 14 A then we take the average of those cylinders of three consecu-15 tive sets and the average of those must equal the 28-day 16 strength required by that design mix. 17 All right. Now the three consecutive sets, each 0 18 set is a set of two 28-day cylinders? 19 That is correct. A 20 And then all sets of three consecutive strenght test 0 21 results must equal or exceed the required class strength of 22 28 days? 23 That is correct. 24 Α. Acc-Federal Report Inc (Witness Parsons) If you look at QA 24 that relates A 25

Sim 11-2

2

3

4

5

6

7

8

11

15

1 to the placement that we were talking about ---

Q Yes, sir.

A --- 219001, there are three consecutive sets on that for 28 days.

Q Right.

A The average strength of each of those three consecutive sets when injected into a running average of those three should not be less than the specified strength at 28 days.

Q And would that 28-day strength be the design strength
that is specified down on the bottom of that QA 24 form?

A That is correct.

Q Okay. Now also along there you have slump requirement, air requirements and the identification of the design makes. Those are the standard things on this form, correct?

A Yes.

Q Okay. And those would be the applicable slumps and air standards and design strengths that the samples being tested have to meet, correct?

A The slumps, we work within a range. They would be -what is reflected here is the test result which if within the range for slump, for instance -- it is okay if it is within the range is what I am trying to say.

23 Q All right. And, for example, here on this 219001, 24 that is given as four plus or minus one inch? 25 A You really have to go to the specifications to make

Sim 11-3

1

2

3

4

5

6

7

8

9

15

16

21

the comparison and not off the corner of this form. The concrete specification has a table which tells what the slump range can be.

Q Okay. Now as to the air requirement it gives a range, right, on the QA 24 form?

A Well, the QA 24 form, these two notations are just for reference. The real governing criteria is within the specification and that is what we compare it against and not this entry here.

Q Well, but shouldn't the specifications as listed on this form be the actual specifications required? I mean if, for example, if the design strength really was 4000 psi, it wouldn't make any sense to have it say 5000 on this form, would it?

A No.

Q So they should be accurate, right?

A Yes, but the point I am trying to make is that the bottom line comparison that we make out there, the comparison upon which we base the final judgment of quality is a comparison with the values in the specification.

Q Okay.

A This is say a secondary entry here and not the
 primary criteria.

24 JUDGE KELLEY: In the normal case though is there 25 any reason to think that it is wrong? Sim 11-4 1

2

3

4

5

6

7

8

9

10

11

13

WITNESS PARSONS: No, sir.

BY MR. EDDLEMAN:

Gentlemen, I just want to refer you one more time 0 to page 22 of Eddleman Exhibit 10, the Ebasco concrete specification. Mr. Garner, I think, has gone over the variation between a strength test result on two cylinders being limited to five percent.

The requirement there we can read of what happens if your variation is more than five percent what you have to do. I don't want to go through that, but I just want to ask your understanding of the next paragraph there concerning the coefficient of variation for the tests on each 12 mix.

Now what is a coefficient of variation, if you 14 gentlemen can define it for me? 15

(Witness Parsons) It is a statistical term that A 16 describes its relationship to the average and expected values. 17 I don't have it in front of me. 18

Q Well now, let me try to pin this down. For example, 19 if I had two tests and the difference between those two 20 specific strengths on the same mix was 15.5 percent, that is 21 greater than 15 percent between those two, would that be 22 a coefficient of variation greater than 15 percent? 23

24

25

A It might help if we have a little bit of an expanded definition of coefficient of variation.

Sim 12-5

1

2

3

4

5

6

7

21

22

23

24

inc.

25

Ace-Federal Reporters

The coefficient of variation is a standard means of measuring a degree of control which a concrete batching facility has over the compressive strength of the concrete which it produces.

The coefficient of variation is dependent upon two statistically computed values, the mean or the average, the 28-day compressive strength and the standard deviation.

8 The mean is the average strength of all concrete 9 cylinders in the population, and standard deviation is a 10 measure of concrete strength dispersion and is defined 11 specifically as the root mean squared deviation of the 12 concrete strength from their average.

The coefficient of variation is mathematically
defined as a standard deviation divided by the mean and is
expressed as a percentage.

A low coefficient of variation, which would be a tall and normal scatter plot of the strength values, implies good control, while a coefficient of variation having short and broad normal probability curves implies fair or poor control over concrete strengths.

This is all a little bit technical, but it basically sets forth a means where you plot the strength test results and get an indication of their scatter.

In simplest terms, if the concrete were all coming in with compressive strength test results very close to each

Sim 12-6

1

2

3

5

6

7

8

8

21

22

23

24

Inc

25

Ace-Federal Report

other, then you would say that your batch plant and your testing was very good. And this is a consideration aside from whether it meets the minimum strength requirements.

If you had a whole series of concrete compressive strength test results which ranged rather broadly, let's say from 5000 psi, being the specified value, up to 6000 to 7000, and it was scattered randomly throughout that, it would give you some indication that your concrete control program was not as tight as it should be.

That is a trending device and it does not lead to the conclusion to accept or reject the concrete or concrete within the structure based on that. It gives you an indication of how well your quality control program is working.

Q Okay. Then if you have a greater variation you have to conduct a review and do something to try to reduce the coefficient, correct?

A You have to conduct a review and determine if there is a reason that needs correction, and, if so, it is a good early warning of potentially your controls are not as tight as they should be.

Q All right. Now let me just ask you another question about the average strength business. If a particular your is below the required strength, it doesn't help if any for the average of it and a whole bunch of nearby pours to be okay as a whole, does it?

It meets specification if it as you described it. Sim 12-7 A 1 If a particular placement drops below this design strength, 2 but it is less than 500 psi beneath the design strength, and 3 the average is as the specifications require, then it meets â the specifications and is acceptable. 5

> Right. But under those condicions that you just 0 mentioned, right? 7

> > That is correct. A

Okay. Now let me try to clarify that just one 0 9 little bit. It doesn't actually make the under strength pour 10 any stronger that the others ones around it are stronger than 11 average, does it? 12

No. You still have to look at that under strength A pour and you have to evaluate it for acceptability and that can be done by the engineers or possibly it can be done by taking the strength test results of that fourth cylinder we were talking about earlier. That fourth cylinder has at times been broken at the end of 90 days, and if the strength is up there at the end of 90 days, then that is something that you take into consideration when you are evaluating it.

21

22

23

24

Inc

25

Federal Reporters

6

8

13

14

15

16

17

18

19

20

The fourth cylinder is the reserve cylinder, right? 0 That is correct. A

Okay. If we can look back at the QA 24 form on 0 pour 2190001. I believe that one reports four cylinders' results. When you do a three-day break as well as a seven

Sim 12-8

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

and a 28-day -- a 7-day break and two 28-day breaks, are you required to have a fifth cylinder as reserve?

Q This is a field prerogative. A 3-day break would be an early indication that in some cases if the break were high enough would allow us to do things in the field, and I am speaking there of stripping the forms early or pouring -getting out on the slab early or some construction consideration would call for the 3-day break. Probably we wanted to strip the forms early. So we would have made an additional cylinder in a case like that.

> Q You would still have a reserve cylinder? A Yes.

Q Okay. Let me refer you gentlemen, if I might, to your Attachment 5 and Revision 1 tc it.

First, I would like to ask you about the original Attachment 5 where the asterisks appear stating "Required for biological shielding." Is biological shielding a special function of containment concrete?

A (Witness Garner) It is for the internal concrete for the containment building.

Q And what is that function about? I mean is it ----MR. BAXTER: Objection, Mr. Chairman. This contention is not about the internal concrete in the containment, but about the 13 pour packages here from the basemat exterior walls and dome.

Ace-Federal Reporters, Inc

MR. EDDLEMAN: Well, the original one says that is Sim 12-9 1 required for biological shielding. MR. BAXTER: That has been deleted. 3 MR. EDDLEMAN: All right. Well, that is what I am 4 trying to get at. 5 MR. BARTH: And we would object because biological 6 shielding is way beyond the parameters of the contention 7 which are the pours are no good because of slump and vibration 8 and compression and not biological shielding. 9 JUDGE KELLEY: Is it withdrawn? 10 MR. EDDLEMAN: I think so. Let me try to see just 11 so that I am not getting confused here. 12 (Board conferring.) 13 MR. EDDLEMAN: Biological shielding referring to 14 the physical integrity of the containment as a shield? 15 MR. BARTH: We object to the question, Your Honor, 16 on the same grounds we objected before. It is beyond the 17 parameters of the contention. 18 JUDGE KELLEY: Did I understand this was deleted? 19 MR. BAXTER: Yes. 20 JUDGE KELLEY: The footnote is not there any more? 21 MR. BAXTER: That is correct. 22 JUDGE KELLEY: Why does it appear on this version? 23 MR. EDDLEMAN: It was prefiled and then they put 24 Ace-Federal Reporters Inc. in a revised one as a correction, as I understand it. 25

Sim 12-10	1	MR. BAXTER: We distributed a revised attachment.
	2	JUDGE KELLEY: All right. I understand.
	3	I am going to sustain both objections. It was
•	4	taken out of the case and we are not interested in biological
	5	shielding anyway.
	6	BY MR. EDDLEMAN:
	7	Q Gentlemen, the main function of the containment
	8	or isn't a main function of the containment to contain, to
	9	keep inside the radioactive materials?
	10	MR. BARTH: Objection, Your Honor. The contention
	11	which is set forth at length on page 4 of the applicants'
	12	testimony states that these pour packages show something is
•	13	wrong with the pour, and hopefully before Wednesday night
	14	we will get there.
	15	MR. EDDLEMAN: Your Honor, I am just astounded at
	16	the degree of let's just look at the letters on the paper.
	17	It seems to me there is a reason why those defects mean
	18	something, and that reason is that the containment has to
	19	perform its function.
	20	JUDGE KELLEY: Why don't we establish whether there
	21	are any defects and the we can worry about that. Perhaps
•	22	you can file an amended contention saying now that you have
	23	found all of these defects, we should do other things to
Are Carloui Dourous	24	fix them. But the burdon is on the proponent of this
Ace-Federal Reporters	25	contention to show that there is any substance in the
	2011	

Sim 13-11

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

Ace-Federal Reporters,

contention itself. Sustained.

MR. EDDLEMAN: Let me just note for the record so that I am not too confused. I thought the burden of proof was technically on the applicants. I am not objecting, but I am just ---

JUDGE KELLEY: I think I was being a little bit literary there. I will withdraw the phrase.

I think, Mr. Eddleman, since you are at bat, the burden is upon you to focus your attention on the thrust of this contention which is the alleged existence of defects in this concrete.

BY MR. EDDLEMAN:

Q Gentlemen, are the allowable slump and air content and design strength data on Attachment 4, Revision 1 taken directly from these pour packages?

A (Witness Garner) It is not taken directly from the pour packages, but it specifies the requirements for the particular mixes that have been used.

Q Well, aren't those requirements also specified fully in the pour packages?

A Yes, it is specified, but these requirements were not taken from the pour packages.

23 Q Well, when we are talking about the pour packages, 24 wouldn't it be more straightforward to take the requirements inc. 25 off of them?

MR. BAXTER: Objection ---Sim 17-12 1 MR. BARTH: Objection, Your Honor. He is arguing 2 with the witness. He should let the witness answer the 3 question. I am trying to confine myself to less lawyer 4 argument, as Mr. Eddleman objected to before, but this has 5 nothing to do with it. This is arguing with this man. He 6 has answered the question. 7 JUDGE KELLEY: Sustained. 8 MR. EDDLEMAN: I don't know if this already comes 9 within the ruling, but let me inquire. 10 Can I ask him if there is a reason why they weren't 11 taken off the pour packages? 12 JUDGE KELLEY: Go back one step now. Is this 13 about the slump requirements, Mr. Eddleman? 14 MR. EDDLEMAN: I believe I asked about allowable 15 slump and reliable air content. 16 JUDGE KELLEY: Allowable slump. Now I thought 17 about 10 minutes ago we talked about the source of allowable 18 slump and we found out that the slump required in the lower-19 left-hand corner was not the basic source of the requirement 20 but rather it came from another source which you checked 21 agasinst. Is that right, Mr. Parsons? 22 WITNESS PARSONS: Yes, Mr. Chairman. The only 23 point I was trying to make there is that the specification 24 Ace-Federal Reporters, Inc. is always the governing specification, and rather than take 25

Sim 12-13 data from subsidiary documents out there, we tried to make 1 sure the source goes back to the real governing specification, 2 and in this case the allowable air content comes from the 3 governing specification, and they come by way of some other 4 subsidiary document on its way there, but that is where it 5 ð comes from. JUDGE KELLEY: And the governing specification 7 comes from where? 8 9 WITNESS PARSONS: That comes from the design engineer. That is the ---10 11 JUDGE KELLEY: The blueprints? 12 WITNESS PARSONS: Yes. 13 JUDGE KELLEY: All right. 14 MR. EDDLEMAN: I will withdraw that past question. 15 Let me ask you about that. 16 BY MR. EDDLEMAN: By governing specification, are you talking about 17 0 18 specification CARSHCH-6? (Witness Parsons) For concrete that is correct. 19 A Okay. And that would apply to these pours as listed 20 0 in this table, or is attachment. Let me look at it. 21 MR. BAXTER: Asked and answered, Mr. Chairman. 22 We have established the applicability of the Ebasco 23 specification which has been admitted into evidence. 24 Acn-Federal Reporters JUDGE KELLEY: That is correct. 25

Sim 12-14

1

2

21

22

23

24

25

Ace-Federal Reporters, Inc.

MR. EDDLEMAN: All right.

BY MR. EDDLEMAN:

Mr. Parsons, when you talked about the congestion 0 3 of rebar in your, I don't know, further explanation or whatever 4 Mr. Baxter started off your appearance here today with, are 5 there sort of basic criteria that you use to determine when 6 a placement is likely to be difficult, as you described these? 7 (Witness Parsons) I think I indicated yesterday A 8 that it was an intuitive feeling based on my experience. 9 Well, what sort of things do you look for, if I 0 10 may ask? 11 (Witness Garner) If I might interject here, we A 12 as a construction inspection group, during the preplacement 13 inspections on that placement, we look at these placements 14 for their complexity in pouring and at that time we get with 15 the area engineer, we get with the people involved with the 16 construction of the placement itself, we look at drawings and 17 we talk about difficulty. And we use these drawings to let

18 we talk about difficulty. And we use enough the enough of the area itself.
19 us know when areas of rebar congestion exist and will exist
20 and also visual observation of the area itself.

And based on this it helps us determine when a pour may be more difficult than others.

Q Mr. Parsons, are those the kind of things you are talking about in forming your intuitive judgment?

A (Witness Parsons) Basically, yes.

Sim 11-15	1	Q Are there others?
	2	A No. Just the results of my past experience on
	3	other jobs where I have known that certain areas are difficult.
•	4	We had a model made of the reinforcing steel around the
	5	containment, and by that I mean a scale model, which we can
	6	look at, and it also aids in making a judgment.
	7	MR. EDDLEMAN:
	8	Judge, may I have a moment? I am sort of running
	9	out of gas here. I want to see if there are some things
	10	that I can wrap up.
	11	JUDGE KELLEY: Go ahead.
end Sim	12	(Pause.)
end take	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
•	22	
	23	
ce-Federal Reporters,	24	
	25	
	1.1.1	

May I refer you gentlemon to Applicants Exhibit No. 0 1 9, and this is a brand spanking new copy I have here. I 2 hope it matches yours. 3 I want to look at page 3.8.1-59 and 60. Three 4 point eight point 1 dash 59 is the first one. 5 (Witness Parsons) Okay, we have caught up to you A 6 on page numbers. 7 All right. Are these quality assurance standards 0 8 and explanations given in this section the ones that would 9 apply to the Harris containment? 10 In asking that, I am also intending to include 11 over on pages 60 and 61, and gosh, I am afraid it goes on 12 beyond there, but if you would look it over and say yes, 13 this part applies, or no, that part does not apply. 14 I would appreciate your just going through that. 15 MR. BAXTER: This whole exhibit is about the 16 Harris containment. 17 MR. EDDLEMAN: It does? Okay, that is what I 18 wanted to know. All right. 19 Gentleman, can I refer you back to the same QA 20 24 report from pour 219001 that we have been talking about 21 earlier? 22 (Witness Parsons) We have it. A 23 There is a column on there over next to the 0 24 ce-Federal Reporters Inc test cylinders entitled Water Added. Does that mean water

12-2-Wal

was added at the lab, or out in the field, or what does that 1 mean? 2 (Witness Garner) That means that water was added 3 A in the field, at the placement site. 4 Okay. Now, when it says like plus seven there 5 0 in the first line, seven what? Seven percent, seven gallons? 6 That would be measured in gallons. 7 A Gallons. And isn't that gallons per truck load 0 8 as to how that works? 9 Yes, that is correct. When you say truck load, 10 A we would like to clarify that by saying depending on the 11 size of the batch it would be that many gallons per batch, 12 whatever the batch size is as specified on the batch ticket. 13 And that batch size and batch ticket would 14 0 typically be the truck yards and truck ticket listed over 15 toward the left side of that form? 16 That is correct. In this case it was seven gallons 17 A of water added to a five yard batch on Truck No. 29. 18 Right. And then the same truck it says came back 19 0 at eleven o'clock, had five yards in at that time too, and 20 nine gallons was added. Is that how that reads out? 21 22 A Yes. Okay. And then the next batch was a different 23 0 truck. Had eight cubic yards and six gallons of water was 24 25 added to that.

5962

Ace-Federal Reporters,

12-3-Walsh

MR. BAXTER: Objection, Mr. Chairman. We are just 1 reading the document into the record again. 2 MR. EDDLEMAN: I just want to make sure that I 3 know how to read it. I withdraw the question. 4 JUDGE KELLEY: If we can't assume that you can 5 read these documents, then I think you just withdraw the 6 contention and we will all stop. 7 MR. EDDLEMAN: I mean I want to make sure I am 8 reading it correctly, pardon me. 9 JUDGE KELLEY: That is what I meant. If you can't 10 read these documents correctly, then there is no point in 11 any of us being here. 12 MR. EDDLEMAN: Well, today I am not sure about my 13 abilities, but I have withdrawn the question. 14 JUDGE KELLEY: All right. 15 BY MR. EDDLEMAN: (Continuing) 16 The ambient temperature as shown on this form, 0 17 that is up in the upper right corner, is that air temperature 18 or concrete temperature? 19 (Witness Garner) That is air temperature. A 20 And the concrete temperature is listed in that 0 21 temperature column, as I think we have already established. 22 That is correct. It is in the body of the form A 23 under, 'temperature.' 24 ce-Federal Reporters. Inc Q All right. Now, is it standard in checking these 25

forms to make sure that the slump and air content are within 1 the specifications written on the form? 2 It is standard ensuring that the slump and air 3 contents are within specification, not necessarily within 4 the numbers that are written on the form. 5 Again, we say that these requirements -- these 6 values are balanced against a specification, and not necessarily 7 the information that is at the bottom of the QA 34. 8 All right. But would that be something that is 0 9 checked by the people who sign this form, or would that be 10 checked by the purson who accepts the entire package. 11 That would be checked by the QA specialist that A 12 signed this particular QA 24. 13 Would the person who signs on the concrete 14 0 placement report, the first sheet in the package, down at the 15 bottom, I think it says: Acceptance of placement methods 16 and completeness of above information. 17 Would that person check that, too? 18 It may not necessarily be that particular person A 19 who makes that check, but it is very possible that it could 20 it. 21 The batch tickets on which we record the results 22 as we are given them in the field by the QC tester, these 23 are reviewed and the inspector who was compiling the 24 Federal Reporter Inc information for the placement is the one who reviews these 25

Ace-Federal Re

11		2965
	1	batch tickets to ensure that results which were out of
	2	specification are reported on a nonconformance report.
	3	Q All right, sir. Let's see.
	4	(Pause)
	5	If we can go back to the direct prefiled testimony,
	6	Mr. Garner when you are talking about attention to more
	7	difficult areas of the placement, in this answer down on
	8	lines 20 and 21, is that basically the same thing we have
	9	been discussing earlier here about places where voids or
	10	other problems could occur?
	11	MR. BAXTER: What page, Mr. Eddleman?
	12	MR. EDDLEMN: Page 3. I thought I said that.
	13	Pardon me.
	14	A (Witness Garner) Yes, that is correct.
	15	Q The inspection documentation I take it includes
	16	beyond the pour packages, all the other documentation of
	17	nonconformances or field changes?
	18	MR. BARTH: Objection, Your Honor. Whether it
	19	does or does not, this does not relate to whether the pour
	20	packages themselves show something is wrong with the pour.
	21	It is irrelevant.
	22	JUDGE KELLEY: Could you tie me in on this page 3
	23	now, exactly where you were.
	24	MR. EDDLEMAN: I am down at the very bottom, Judge.
porters,	Inc. 25	The last phrase in lines 23 and 24.

2-6-Wal		5966
	1	JUDGE KELLEY: 23?
	2	MR. EDDLEMAN: Lines 23 and 24.
	3	JUDGE KELLEY: All right. Page 3, lines 23 and 24.
•	4	All right, I am there. Repeat your question, please?
	5	BY MR. EDDLEMAN: (Continuing)
	6	Q The question is: Does the inspection documentation
	7	include nonconformances in design changes and things that
	8	aren't in the pour packages?
	9	MR. BARTH: And the objection, Your Honor, was
	10	that this is not relevant to whether the pour packages
	11	themselves shows something is wrong with the pouring of
	12	the concrete.
•	13	MR. EDDLEMAN: I think he is right. I withdraw
	14	the question.
	15	JUDGE KELLEY: All right.
	16	BY MR. EDDLEMAN: (Continuing)
	17	Q Let me see here. Mr. Garner, on page 7, when you
	18	talk about consolidation of concrete, does that include
	19	vibration?
	20	A (Witness Garner) Vibration is a method by which
	21	proper consolidation is achieved, and a consolidation is
	22	the blending of the mix constituents together to the maximum
	23	practical density, fitting tightly against all forms and
indexed Process	24	embedded items in the placement.
ederal Reportars	, Inc. 25	It is one of the aspects of the placement operations

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

that are involved in our inspections. Okay. And were it not -- were it not properly Q consolidated, that is where you could have voids or honeycombing? If not properly consolidated, that is where you A could have voids or honeycombs, yes. Thank you. On page 8, there is a discussion of 0 what happens when out of specification conditions are found in either slump or air content. It says on lines 21 and 21 when that happens the placement is controlled until further testing is conducted. Does, 'controlled' there mean interrupted or stopped?

A It could mean both. It could mean that we slow the placement down, or that we completely stop the placement until we do the testing on the next available truck, after we have found that we have an out of spec condition in either the air or slump, and then we will continue to test the trucks until the concrete is brought back into compliance.

Q Now, by truck there, do you mean the truck loads of concrete that are being delivered for the placement? A Yes. The concrete -- the batches of concrete are

brought down on the concrete truck.

Q All right.

A (Witness Parsons) If we get an out of spec condition

Ace-Federal Reporters, Inc.

12-3-Wal

on a load of concrete, the typical thing that we do is reject that load of concrete, pull that truck out of line, and back another one in.

5968

So, the question you asked about whether we stop the placement is a little difficult to answer. We probably did not.

Q So, in other words, what you are saying is you would typically just stop from using that truck load and bring the next truck in, rather than stopping placing concrete. You just wouldn't use the concrete that was found to be out of specification.

A

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

That is correct.

Q And would that normally show up then on these concrete placement reports as the yards rejected?

A That is correct.

Q Okay. I think I am coming up against the edge of my preparation, and also the edge of my ability to go forward.

JUDGE KELLEY: Well, I understand. As we said earlier, we would do what we could do, and maybe we have about reached that point.

I want to make one further comment in regard to the question of codes, national codes. I know earlier, before lunch, Mr. Eddleman was asking some questions about codes. It was reference to the front part of the EBASCO

Ace-Federal Reporters, Inc.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

concrete spec, and there came a time when I expressed my doubt about whether we had that much occasion to get into the codes, and I think what I reflected -- or hope I reflected -- was my concern that we start getting a manageable grip on this contention, and where we are going to go with it.

It seems to me that we haven't just looked at pour packages, because we all recognize we have to go somewhere back of the packages as a matter of background and the testimony of applicants, among other places, reflects that, too.

So we spent some time asking questions. And we ended up putting in the EBASCO concrete spec today because that ties certain things together, and that seems to make sense.

What was troubling me was whether we were going to go a further step and start litigating whether what was done here was consistent with various national codcs. It never occurred to me we would do that, and I don't think the testimony addresses that really, in any direct way.

I did look again at the Applicants testimony and Mr. Stokes' affidavit, and the Applicants testimony, does refer in various places to some code provisions, but not with any particular specificity.

Ace-Federal Reporters, Inc.

12-10-Wal

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

As I understand it, the intent is to say we derived our procedures from national codes, in a general way, but there isn't any text. There is no effort to prove text of codes, and it doesn't seem to me that the Applicants are putting at issue any detail lititation of various ASTM code provisions.

Similarly, Mr. Stokes -- I looked over his affidavit on a quick perusal -- and he doesn't refer to any national codes that I could find. And I haven't looked at the Staff's testimony from the same perspective, but Mr. Barth, do you rely on the ASTM code text to any substantial extent?

MR. BARTH: No, Your Honor.

JUDGE KELLEY: Okay. Well, that was my concern. You know what we went through on the fire protection code provision two weeks ago on a much narrower subject, and I just thought if we had to had to, but it didn't seem to me the contention itself put that at issue and that we probably didn't have to get to that point.

MR. EDDLEMAN: Judge, not to be debating, but just for information, I believe Mr. Stokes at the top of page 7 of his affidavit does refer to a particular section, 4.3.5 of the American Concrete Institute 349 Code.

JUDGE KELLEY: Where is that?

MR. EDDLEMAN: Page 7 of Mr. Stokes affidavit.

5970

Ace-Federal Reporters, Inc.

12-11-Wal

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

JUDGE KELLEY: ACI 349, you are right. That is one reference. Are there any others that you know of?

MR. EDDLEMAN: I just looked through it fast, too. I don't want to be bound by what I can do today, but --

JUDGE KELLEY: I missed that one.

MR. BAXTER: And I also have to tell you that at the bottom of 15, top of 16 of Applicants testimony, we are taking issue with Mr. Stokes testifying that ACI 349 doesn't apply, rather it is ACI 359, and we do describe in this one instance what a subsection of that code requires.

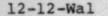
JUDGE KELLEY: Okay. In that kind of a case, maybe it would be necessary to put the code text in and have them in evidence so we can get that straight, but just reflecting really a concern about taking these pour packages and tracing them back to the ASTM codes from beginning to end, and I just don't think that is doable, and I don't think that is what this contention contemplates.

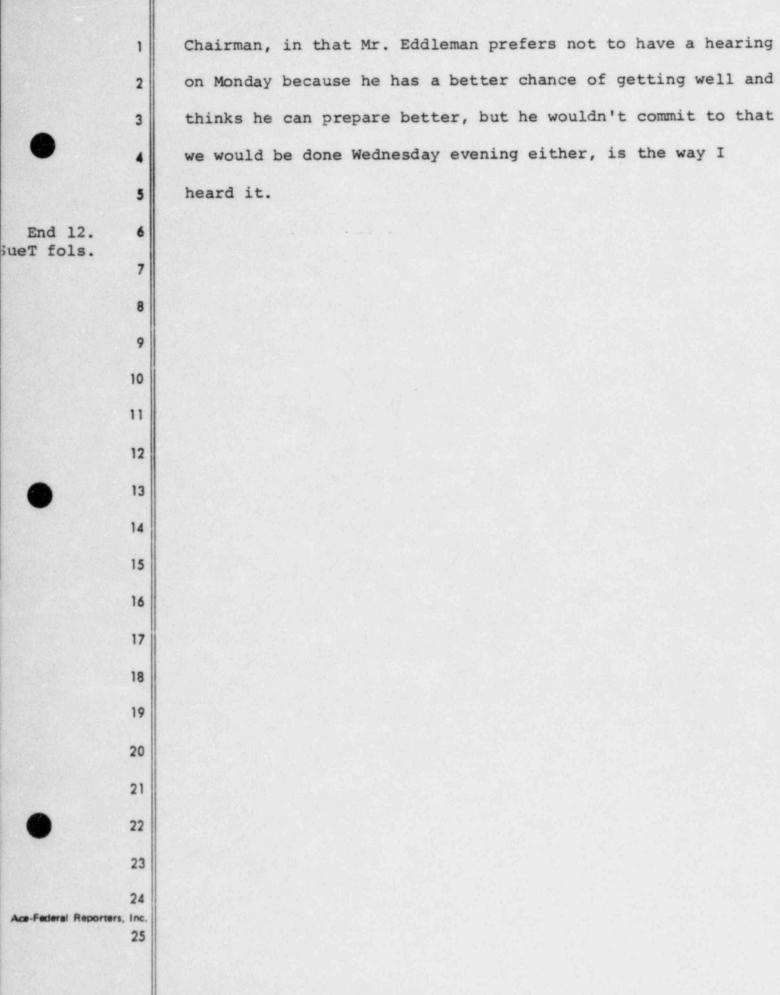
That was what I was referring to. This is all by way of a general observation, but having said what I said before, I wanted to indicate what my further review of some of these materials seem to indicate.

I gather we have decided not to go forward with the Monday hearing that we talked about for a while. That seems to be the consensus?

MR. BAXTER: Well, we got left in limbo, Mr.

Ace-Federal Reporters, Inc





#13-1-SueT

1

2

3

4

5

6

19

20

21

22

23

24

25

MR. EDDLEMAN: What I said was, you know, as Best I can under the condition that you might have to go a little bit later than your normal six o'clock on either Tuesday or Wednesday perhaps, that I was going to do the best I could.

I just didn't want to make an absolute commitment and in the condition I'm in I didn't want to say I guarantee you a hundred percent, come hell or high water, that you will 7 be. I can guarantee you eighty-five percent. 8

JUDGE KELLEY: I understood that. I think the 9 Board is willing to go a little later than usual. We can go 10 until 7 instead of 6 if we need it to get something done. 11

We certainly do expect, in scrapping the Monday 12 project -- which I thought we had pretty much done although 13 we hadn't said it in so many words -- we expect to finish 14 this contention at the close of business on Wednesday, 15 whenever the close of business occurs. 16

Okay. Well, we would then plan to -- just a 17 minute. Hold on just a minute. 18

(The Board members are conferring.)

Well, the Board would like to set the 9:30 time to start Tuesday morning with the expectation that we will go, in any event, until 6:30 and if we need to go a little longer out of lack of progress we can do that, too.

Ace-Federal Reporters, Inc.

the day, and that is whether the subpoeaned witnesses should

We have one ruling on a matter argued earlier in

#13-2-SueT

1

2

3

4

22

Ace-Federal Reporters

be -- I think it was generally acknowledged that it would be a panel set up. The question was whether it would be two panels or one panel.

And we are going to rule that there should be one 5 panel of all five. It seems to us, from what we know of the case and what we have heard, that there is good reason to 6 expect overlapping knowledge among these people. That's the 7 main reason to have a panel. It's more efficient. We will 8 go ahead and put them all on at once. We think we will get 9 10 a better record that way.

11 And we don't have any basis, any solid basis, for creating two panels out of concern for candor or fullness of 12 testimony. One can speculate about how employees of a com-13 pany react, whether they are more open in separated panels 14 15 along the line Mr. Eddleman suggested or just all at once. But we don't think it's anything more than speculation. 16

And since we have a good reason on one side to have 17 one panel and nothing but speculation on the other, we are 18 deciding to have it done on the basis of one panel. 19

Is there anything else we should address this after-20 noon before we stop? Mr. Eddleman. 21

MR. EDDLEMAN: Judge, if I could ask your indulgence, and also to give you just a little extra insurance, there are 23 a couple of short question areas that occurred to me that I 24 would like to try to get through with these witnesses before 25

3

4

5

6

7

8

16

17

18

19

25

Ace-Federal Reporters, Inc.

they go out of my mind, and I think it will maybe take five minutes or ten at the most.

JUDGE KELLEY: Yes, you can do that in just a minute. Let me just finish checking around.

Anything else, Mr. Barth?

MS. MOORE: Yes, Mr. Chairman. The Staff has one matter but it is unrelated to this contention.

JUDGE KELLEY: Okay.

9 MR. BAXTER: Mr. Chairman, I was going to propose --10 I can do this after Mr. Eddleman has finished his examination 11 for the day -- if we have time this afternoon and without 12 asking for the Board's ruling in any sense, or necessarily 13 Mr. Eddleman's response, I would be willing to take the time 14 now to make my argument as to why I think rebuttal testimony 15 by Mr. Stokes on Tuesday would be inappropriate.

It could save some time.

JUDGE KELLEY: It sounds like a good idea. We have been sitting here for an hour and a half. Can we take a five minute break and then come back and finish this up, please?

20 MR. EDDLEMAN: Fine. I just wanted to make sure I 21 would be able to get hold of the transcript that gives Mr. 22 Baxter's argument that he makes now on Tuesday? Is that --

JUDGE KELLEY: We will have to talk to the reporters and see what we can set up.

MR. EDDLEMAN: All right. That's the only concern

I have. It's fine to have him go ahead. #13-4-SueT 1 JUDGE KELLEY: We will see what we can do. 2 MR. EDDLEMAN: All right. 3 JUDGE KELLEY: We will take a short break. 4 (Whereupon, the hearing is recessed at 3:30 p.m., 5 to reconvene at 3:40 p.m., this same day.) 6 JUDGE KELLEY: We can pick up here. Judge Carpenter 7 will be right along. Why don't you go ahead, Mr. Eddleman? 8 MR. EDDLEMAN: All right. 9 10 BY MR. EDDLEMAN: (Continuing) Gentlemen, when you -- your counsel I think made 11 0 reference to some comments of yours on Piges 15 and 16 about 12 Mr. Stokes' references to the ACI-349 concrete code. 13 I would like to refer you to Page 7 of his Affidavit. 14 15 Do vou have that? In the second line, he refers to Code Section 4.3.5 16 as providing guidance for accepting a pour, does he not? 17 (Witness Kanakaris) Yes, he does. 18 A And that's different than the sections that you 19 0 quote in your testimony, isn't it? 20 21 That's correct. A All right. Now, if I could turn back to your 22 0 testimony, may we look at the top of Page 12 first? I apologize 23 for skipping around a little, but what I'm trying to do is 24 Federal Reporters, inc. laundry list out a few things that are in my mind now so that 25

#13-5-SueT

2

3

4

5

6

7

8

9

22

23

I don't have to remember them over the week-end.

In the third line, reference is made to a workable mix. Is there sort of a definition of workable mix in terms of its properties like slump, for example, or consolidation?

A Well, the workable mix is whatever the construction feels will be required to make the proper placement and obtain the results that the specification requires to be obtained.

So, it's a matter of experience primarily and judgment.

(Witness Parsons) If the question was directed 10 11 towards what a workable mix is, it's as George says. And I tend to think of it as looking for something that has a, say, 12 higher slump or smaller aggregate or something else that would 13 provide a better probability that it can be consolidated and 14 worked through the reinforcing steel. Or, in the case of 15 what's in the testimony, could be properly consolidated up at 16 17 the dome, underneath the hub plate.

Q Okay. Down at the bottom of Answer 16 on that same page, it refers to drilled core samples there. Were any drilled core samples taken on any of the pour packages that are in evidence on this contention, to your knowledge?

A Yes.

Q On which cores, do you recall?

A On the CB290001, which is Exhibit 10. Correction.
 Federal Reporters, Inc.
 25 That's Exhibit 14.

#13-6-SueT	1	Q	Exhibit 14? Is it the same pour number, 290001?			
	2	A	Yes.			
	3	Q	I noticed you gentlemen looking around. Are there			
•	4	any others	besides that to your knowledge?			
	5	А	Not that I'm aware of.			
	6	Q	True also, Mr. Garner?			
	7	А	(Witness Garner) Not that I'm aware of.			
	8	Q	Okay. Thank you. On Page 15, sort of the first			
	9	full parage	raph after the indentation on Line 6, the reference			
10		there to st	teel slick rods, what is a slick rod?			
	11	А	This is a steel rod that is used to aid in consoli-			
	12	dation of the mix used in areas of dense rebar on the exterior				
•	13	wall of the	e containment building. These rods were inserted			
	14	through the	e form work into the pour onto which form vibrators			
	15	were attacl	ned, and they were energized at periodic intervals			
	16	during the	placement to aid in consolidation.			
	17	Q	Okay. Now, what's a form vibrator?			
	18	A	A form vibrator is another means of consolidating			
	19	concrete.	It's a vibrator that is attached to the form and			
	20	it creates	vibrations on the form itself.			
	21		(Witness Parsons) Now, they were not used by			
•	22	attachment	to the forms here. We need to make that understood.			
	23	Q	All right. That's what I was trying to get at.			
Ace-Federal Reporters	24	A	The form vibrator is something that can be it			
And the second s	25	could be a	ttached to anything, but it was manufactured to be			

#13-7-sueT

1

2

3

4

5

attached to a form, and then when you turn it on it vibrates the form. That's a rather risky thing, and we have never used it in that situation, because you can turn the entire placement liquid and then you greatly increase your pressure and you might break your forms.

However, we did set up special placement techniques 6 7 out here which incorporated sticking what you would call sacrificial steel rods through the forms back into the con-8 9 crete in these areas of heavy reinforcement where you would have a hard time getting a vibrator in. Those were left in 10 11 there. The concrete was placed, and as it rose up around 12 these forms, up around these slick rods, we would attach the form vibrators and turn them on. :3

And this had the effect of vibrating that whole rod back inside the placement. And we knew -- they had been prepositioned so we knew we had something vibrating in the areas that we felt it might be risky -- not risky but difficult to get the conventional vibrator into it.

Q Okay. Now, if I understand it right the rod is stuck through a hole where some kind of penetration of the form into where the concrete is coming up.

22

Ace-Federal Reporters.

A That's correct.

Q The form vibrator is on the outside and when the concrete comes up, you turn it on, that shakes that rod. A That's correct.

#13-8-SueT 1

2

3

4

Q Okay. You leave the rod in place in the concrete? Is that how this happened?

A Yes. And it was intended to be left in there. Q Uh-huh. Okay. And --

A After you leave it in place, of course, the concrete sets up two or three or four days, you strip the forms off. You have this rod sticking out. It's not part of the design, it's not required. And, of course, it's an eye sore and possibly a safety hazard if somebody would walk by and bump their head on it.

We, therefore, cut it off just back from the surface of the concrete and put a thin skin coat of patching material over the visible portion of the rod so that it wasn't visible.

15 Q So you kind of cut it off more to the surface and 16 patched over it; is that the idea?

A Yes. That's what we often call a cosmetic patch. Q All right. Now, is the -- the vibration of this rod, is it like back and forth along the rod or side to side, or both?

A It's an oscillation. It would be up and down.
Sideways.

Q Up and down or sideways? In other words, if the
 rods length is going, say, north/south, then the sideways would
 be east/west?

#13-9-Sue1	A Yes.
	2 Q Or up and down?
	A Yes.
•	Q Okay. The reference to neat line there in Line 11,
	just for clarity what is a neat line?
	A That's a term we use to describe the surface of
	7 the concrete.
	8 Q So that would describe the edge of the top or the
	9 side of the concrete?
1	0 A Yes. That sentence could also read that these rods
1	were cut off below the surface of the concrete. And the
1	2 concrete was cosmetically patched.
	3 Q Okay. And that definition of neat line would apply
	4 generally, though, it would be the surface?
1	5 A That's correct.
1	6 MR. EDDLEMAN: Let me see. I think I've covered
	what I thought I could. But let me see.
1	8 Gentlemen, thank you. I believe that's all I lave.
	9 MR. BAXTER: Altogether, or for today?
	MR. EDDI,EMAN: No, no, no. For today. I'm sorry.
	You see, I'm so out of it I almost gave the panel away.
•	MR. BAXTER: When you say thank you, I usually
	think that comes right with good-bye.
	(Laughter.)
Federal Reporters, I	MR. EDDLEMAN: I can thank these gentlemen several

Ace-

#13-10-SueT 1

2

3

4

5

6

7

8

11

14

16

17

18

22

23

24

25

Acz-Federal Reporters, Inc.

times. I mean, I think they are worthy of it.

Let me just say also before I forget -- oh, goodness, I looked at my note about Mr. Runkle and I see I have another note about something else. I take it back, I've already asked it. But Mr. Runkle didn't show up, and I gather that's because he is ill. And I will try to communicate to him what the Board said earlier about the FOIA appeal. I will try to get that information to him.

JUDGE KELLEY: Okay. And Mr. Baxter was going to 9 make his argument on a rebuttal point. Did you want to leave? 10

MR. EDDLEMAN: Yes. I asked off the record earlier 12 if I could be excused, because I'm not going to jump up and down and scream during this argument anyway. And so I think 13 I could just as easily read it in the transcript and try to 15 respond to it.

MR. BAXTER: I'm hurt.

JUDGE KELLEY: You could lose some of the flavor. (Laughter.)

MR. EDDLEMAN: I'm well aware of Mr. Baxter's 19 oratorical skills but right now I think I need medical atten-20 tion instead of lawyers. 21

JUDGE KELLEY: Okay. Gentlemen of the panel, I hope you have a nice week-end. We will excuse you for now and expect to see you Tuesday morning. Thank you.

(The witness panel is excused.)

#13-11-SueT 1

2

3

4

5

6

7

17

18

19

20

23

24

25

MR. BAXTER: Mr. Chairman, Mr. Eddleman has indicated this week that his witness, Mr. Stokes, is going to be bringing with him to the hearing on Tuesday written rebuttal testimony. So, obviously my argument now is without benefit of having specifically reviewed that testimony, and there may be even additional reasons why we think that procedure is inappropriate.

But right now I simply want to call the Board's attention to a couple of principles and several facts. The NRC's rules of practice do provide for submission of rebuttal testimony, although in most adjudicatory forms rebuttal is typically associated with the party which has the burden of proof, which in this case is the Applicants. There is case law within the NRC on --

JUDGE KELLEY: Where is the rule? Is there a specific rule involved?

MR. BAXTER: 2.743(a). You will find it doesn't give you a lot of guidance. It's simply --

JUDGE KELLEY: That's no surprise.

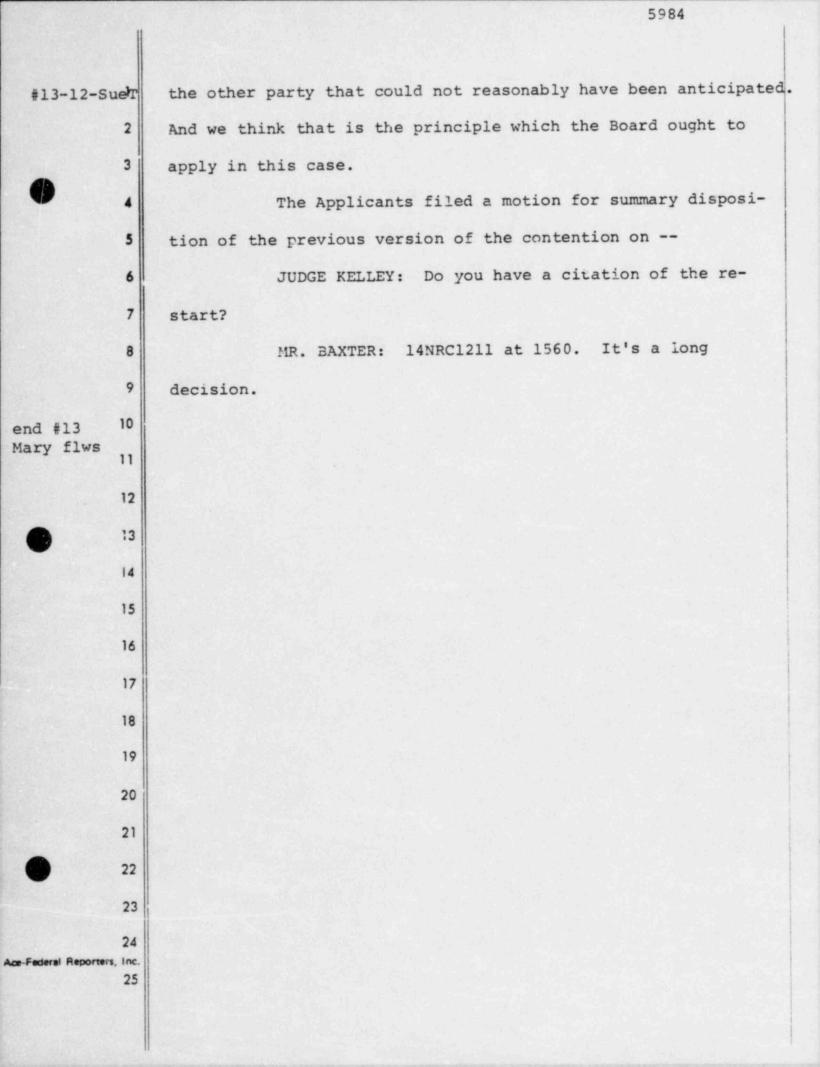
(Laughter.)

That's right out of the APA, that whole provision
I think. It's just lifted; it's very close. Go ahead.

MR. BAXTER: Case law in the Three Mile Island Unit 1 restart proceeding has held that rebuttal should be used only where material appears in the direct testimony of

5983

Ace-Federal Reporters, Inc.



Sim 14-1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

Inc.

25

Ace-Federal Reports

JUDGE KELLEY: It is a long opinion.

MR. BAXTER: It is an initial decision of fact findings.

JUDGE KELLEY: I interrupted you I think.

MR. BAXTER: The January 18, 1984 affidavit of Mr. Parsons in support of our motion for summary disposition has all of the information that is now contained in the what I would call the first half or the general section of our testimony which describes how concrete is placed, what are the governing procedures, who designed it, what the basic principles governing the containment design are and the stance of honeycombing in the second basemat, which was discovered and repaired according to site procedures.

Our filing of June 29, 1934 in response to proposed Eddleman Contentions 65A and 65B, which included at that point Mr. Stokes' affidavit, also contains a point-by-point rebuttal to Mr. Stokes' affidavit and what he said about each of these 13 pour packages.

It is that Stokes' affidavit which is the direct testimony Mr. Eddleman is presenting, and it is that pointby-point analysis of June 29 which makes up the back half of applicants' prefiled testimony.

So that our testimony on August 9, 1984, even ignoring what we think Mr. Eddleman could have ascertained and did ascertain through discovery, contains all the

Sinm 14-2

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

information that was in these previous two documents, and we think there is absolutely no argument available to him that we have presented information that is unforeseeable.

We are talking about a building that is built and we are talking about documentation that pre-existing and arguments that have been made back and forth on both sides.

Beyond that, of course, our separate objection is simply to the lack of timeliness of filing this rebuttal. This latest testimony of ours, which consolidates the information in these two previous filings, was served on Mr. Eddleman on August 9, 1984. That is by now two and a half months ago.

Now that is unusual in NRC practice. The reason that was filed so far in advance was to accommodate the fact that we had a bifurcated management and safety hearing. So all the testimony went in early. But certainly they have had, he and his witness, Mr. Stokes, have had enormous amounts of time if they felt rebuttal was necessary, to reduce that writing and to provide it to the other parties. So that maybe some effort could have been made to accommodate them if that were desirable to do.

Now we have Mr. Stokes bringing to the hearing for the first time some written testimony which is going to be made available to us at that time, accompanied by a request that we please accommodate him so that he can leave that day.

24 cz-Federal Reporters, Inc. 25 sim 14-3

1

2

3

4

5

6

7

8

9

21

Inc

25

Ace-Federal Reporters

And without even seen it, these are the objections we have to proceeding in that manner. I will probably have more to say once we get a chance, if we do, to read that testimony before or during the hearing on Tuesday.

JUDGE KELLEY: Just one comment which I would assume anyway, but if you get it first thing Tuesday you will read it over and then you can either confirm that there is nothing new or you can address whatever is new at some later point, right?

MR. BAXTER: I can have other people read it over. I will find it difficult to read it while I am sitting at counsel table.

JUDGE KELLEY: Not necessarily you personally, I think the point that you make, if you did have these earlier affidavits and if there is nothing in the rebutual beyond answering those affidavits, then we would have a problem with it as rebuttal.

We hear your argument and we would just like to hearing the further point once you have looked at it whether you think that is the case or not.

MR. BAXTER: I will do that examination.

To sum up though, I think what we are talking about here is an attempt to file direct testimony late and not rebuttal testimony.

JUDGE KELLEY: Thank you.

Mr. Barth, do you have any comment at this point? Sim 14-4 1 MR. BARTH: Not so elegant extempore. I would 2 prefer to address this after I see the testimony, Your Honor. 3 JUDGE KELLEY: Okay. 4 Well, hopefully -- not hopefully because this is 5 coming in Tuesday. We will have it first thing Tuesday 6 and then we will take some time to hear further rebuttal 7 maybe at mid-day or whenever we best can. 8 Does that cover that point then? 9 MR. BAXTER: Yes, thank you. 10 MR. BARTH: Yes. 11 JUDGE KELLEY: Anything else before we stop for 12 today? 13 Yes. 14 MS. MOORE: Yes, Your Honor. The staff had a 15 matter to raise with regard to pending motions for summary 16 disposition on Eddleman Contentions 144 and 154. 17 The staff's responses to those motions are due 18 on November 2nd. We would like to move the Board for an 19 extension of that date until November 8th. 20 I have spoken with Mr. Eddleman and with Mr. Baxter, 21 and they both have agreed to that extension. Mr. Eddleman 22 would like an equivalent extension for himself, and we had 23 no objection to that, of course. 24 Ace-Federal Reporters, Inc. JUDGE KELLEY: These are emergency planning points? 25

MS. MOORE: Yes, Your Honor, the onsite emergency Sim 14-5 1 planning contentions 2 JUDGE KELLEY: Onsite? 3 MS. MOORE: Yes. 4 JUDGE KELLEY: Are they on a different track than 5 the offsite things we were talking about before? I thought 6 your motion which we gave the suspension on until, what, the 7 13th of November or something, does it not encompass what 8 Ms. Moore is referring to? 9 MR. BAXTER: Those deadlines are last days for filing 10 summary disposition motions. We have already filed two. 11 We are agreeing to the extension. 12 JUDGE KELLEY: I understand. 13 MS. MOORE: Yes. These are responses to motions 14 that have already been filed. 15 JUDGE KELLEY: Oh, okay, I understand. Granted. 16 MS. MOORE: Thank you. 17 JUDGE KELLEY: Anything else? 18 MS. MOORE: The staff has nothing further. 19 MR. BAXTER: Nothing from the applicants. 20 JUDGE KELLEY: 9:30, about, Tuesday morning. 21 Thank you. 22 (Whereupon, at 4:02 p.m., the hearing adjourned, 23 to reconvene at 9:30 a.m., Tuesday, October 30, 1984, in the 24 Ace-Federal Reporters, Inc. U.S. Bankruptcy Courtroom, Raleigh, North Carolina.) 25 \*\*\*\*\*\*\*\*\*

## CERTIFICATE OF OFFICIAL REPORTER

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

NAME OF PROCEEDING:

SHEARON HARRIS NUCLEAR POWER PLANT

DOCKET NO .: 50-400-0L \$ 50-401-0L

PLACE: APEX, NORTH CAROLINA

DATE: FRIDAY, OCTOBER 26, 1984

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

(Sigt) (TYPED) GARRETT / WALSH .

Official Reporter

Reporter's Affiliation: ACE Federal Reporters.

May Chuon

MARY C. SIMON Official Court Reporter ACE Federal Reporters

Dayler.

MYRTLE H. TRAYLOR Official Court Reporter ACE Federal Reporters