NUCLEAR REGULATORY COMMISSION

ORIGINAL

ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:

DUKE POWER CO	MPANY) DOCKET	NOS.	50-413
Catawba River	Units 1	& 2)		50-414

DATE: October 7, 1982 PAGES: 380 thru 567

AT: Charlotte, North Carolina

TRXI

8210130207 821007 PDR ADDCK 05000413 PDR

ALDERSON ____ REPORTING

400 Virginia Ave., S.W. Washington, D. C. 20024

Telaphone: (202) 554-2345

0	2	0	7	0	2
0	U	U	3	0	U

1	UNITED STATES OF AMERICA
2	NUCLEAR REGULATORY COMMISSION
3	ATOMIC SAFETY AND LICENSING BOARD
4	x
5	In the Matter of: :
6	DUKE POWER COMPANY : Docket Nos. 50-413
7	Catawba River Units 1 & 2 : 50-414 :
8	x
9	Thursday, October 7, 1982 Board Room, Fourth Floor
10	Mecklenburg County Administration Building
11	720 East 4th Street Charlotte, N. C.
12	The PREHEARING CONFERENCE in the above-entitled matter
13	convened, pursuant to adjournment, at 10:00 a.m.
14	BEFORE:
15	JAMES L. KELLEY, Chairman,
16	Administrative Judge Atomic Safety and Licensing Board
17	DR. DIXON CALLIHAN, Member
18	Administrative Judge Atomic Safety and Licensing Board
19	DR. RICHARD F. FOSTER, Member
20	Administrative Judge Atomic Safety and Licensing Board
21	APPEARANCES:
22	On behalf of the Applicant:
23	J. MICHAEL McGARRY, III, Esq.
24	AL V. CARR, Esq.
25	ANNE COTTINGHAM Debevoise & Liberman
	1200 Seventeenth Street, N. W. Washington, D. C. 20036 (Continued)
Sec. 6	

RA

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

	000381	
1	APPEARANCES: (Continued)	
2	On behalf of the NRC Staff:	
3	GEORGE JOHNSON, Esq.	
4	and K. N. JABBOUR, Project Manager	
5	U. S. Regulatory Commission Washington, D. C. 20555	
6	On behalf of CAROLINA ENVIRONMENTAL STUDY GROUP:	
7	JESSE L. RILEY	
8	854 Henley Place Charlotte, N. C. 28207	
9	On behalf of PALMETTO ALLIANCE:	-
10	ROBERT GUILD, Counsel	
11	& MICHAEL LOWE, Director	
12	314 Pall Mall Columbia, S. C. 29201	-
13	On behalf of CHARLOTTE-MECKLENBURG ENVIRONMENTAL COALITION:	-
14	HENRY A. PRESSLER, Chairman	
15	943 Henley Place Charlotte, N. C. 28207	
16		
17		
18		Street, St
19		
20		
21		
22		
23		the second second
24		
25		
		1

. . ! .

ALDERSON REPORTING COMPANY, INC.

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

PROCEEDINGS

	2	
	3	JUDGE KELLEY: Good Morning. This is the second pre-
	4	hearing conference in the Nuclear Regulatory Commission's ongoing
115	5	proceeding concerning the operating license application for the
554-23	6	Catawba Nuclear Power Facility. I see at least one new face among
(202)	7	the Counsel tables this morning. A lot of old faces, perhaps I
20024	8	should say familiar faces. Why don't we just introduce ourselves
D.C.	9	for the record anyway to establish who's here. We want to start
GTON,	10	on the left and go to the right.
S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2315	11	MS. COTTINGHAM: I'm Anne Cottingham with Debevoise and
NG, WI	12	Liberman. I'm here on behalf of the Applicant, Duke Power.
IIIII	13	MR. MCGARRY: My name is Michael McGarry and I'll be
ERS BI	14	assisting in the representation of Duke Power.
PORTI	15	MR. CARR: My name is Al Carr, Counsel for Duke Power
V. , RE	16	Company.
	17	MR. JOHNSON: I'm George Johnson, and I'm Counsel for the
STREET,	18	NRC Staff.
300 TTH	19	MR. JABBOUR: I'm Kahtan Jabbour and I'm Project Manager
30	20	for the NRC Licensing of Catawba.
	21	MR: RILEY: I'm Jess Riley and I'm Spokesperson for
	22	C.E.S.G.
	23	MR. GUILD: Mr. Chairman, my name is Robert Guild, and
	24	I'm Counsel for Palmetto Alliance and with me is Director, Michael
	25	Lowe.

ALDERSON REPORTING COMPANY, INC.

1

JATAL

REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

300 7TH STREET, S.W.

MR. PRESSLER: Henry Pressler, I'm the Chairman of the 1 Charlotte-Mecklenburg Environmental Coalition, Internvor. 2

000383

JUDGE KELLEY: Thank you. The Board next would like to thank on the record, the Applicants for the site visit which they A took a group of us on yesterday, the Board, and representatives of 5 the Intervenors and N.R.C. Staff. We thought it was a very well 6 conducted tour, very informative and we appreciate it. 7

The occasions for this second prehearing conference are 8 basically two. One is the Appeal Board's decision last month and 9 a very long one, known generally as ALAB-687, which resolved some 10 issues that had been in dispute about contentions before the 11 Board, and that decision has been rendered by the Appeal Board. 12 We are now in position to implement that decision and apply it 13 to the contentions in this case. 14

The second main reason for being here is the fact that 15 the Staff's Environmental Impact Statements, its Draft Environ-16 mental Impact Statement, was issued in mid-August, and under our 17 prior prehearing order, we established the procedure whereby 18 contentions could be filed with respect to the Draft Impact 19 Statement, if filed within 30 days after the availability of the 20 statement, with respect to new information -- nothing else -- and 21 we have had some proposed contentions filed with respect to the 22 statement. 23

In response to those contentions, we have received from 24 the N.R.C. Staff and from the Applicants, largely in opposition to 25

JATA3

20024 (202) 554-2345

D.C.

REPORTERS BUILDING, WASHINGTON,

300 7TH STREET, S.W.

1 -- at least to those new proposed contentions, and the Board -2 we're here today to get some further information from the parties and
3 to give them an opportunity to say things they might not have been
4 able to say prior to this, so that we can make decisions on those
5 new contentions.

We thought that first we would like to talk about the
effect of the Appeal Board decision on where the case stands now
and where it ought to be put. To that end, we had put to the
parties a series of, I believe five different quastions, which
in many respects were overlapping, but there are five questions
that were designed to elicit a pretty clear statement and position
about what ought to be done now.

There was, as we look at it, a significiant degree of 13 agreement among the parties in the interest of those questions, 14 and some divergence, however, toward the bottom line question of 15 what this Board ought to do about the contentions previously 16 submitted on a conditional basis, and we don't need to go over all 17 of those questions -- obviously not the ones everybody agrees on 18 anyway, but we would like to ask a few questions this morning and 19 give you a chance to comment on the area or areas where there 20 appear to be some difference of opinion. 21

There seems to be unanimity and the Board thinks that the decision by the Appeal Board doesn't have any automatic effect and they didn't rule on any particular contentions -- they pretty clearly left it to us to do that by applying the principles that

JATA4

1

3

5

D.C. 20024 (202) 554-2345

REPORTERS BUILDING, WASHINGTON,

300 7TH STREET, S.W.

they had laid down, and the second point on which there seems to be agreement, obviously you'll have a chance to contradict me if I've 2 attributed agreement where none exists in a few moments, but the second point where there seems to be agreement, the Board in its 4 order of March 5, 1982, admitted on a conditional basis, I believe a total of 16 contentions, tendered them -- or contentions that we 6 found to be vague in one degree or another, but which we thought 7 might be made acceptably specific if at some later date a docu-8 ment from the Staff, such as the Staff Impact Statement, supplied 9 information that would allow the preponderant of the contention 10 to make it more specific. 11

So we let in ten of those contentions and said that when 12 the relevant document appears, please make it more specific or 13 withdraw it. 14

The second category or the category of six contentions 15 which were similarly vague and varying in respects, but which it 16 seemed to us might possibly have been made more specific through 17 the process of discovery, so we allowed in six contentions I be-18 lieve it was, and said, well, these are rather vague but you can 19 have discovery for 90 days and then do what you can by way of 20 making them more specific. 21

A basic aspect of the Appeal Board's decision and a key 22 ruling really was that this concept of conditionally admitting 23 a contention subject to later specification, either through a 24 document, or through discovery, was not permissible. They held that 25

1

2

3

4

5

6

TA5

contentions are not to be admitted unless they met the basic specificity requirements set forth in the Rule of Practice 2.714, so we asked the question to the parties of, in light of the Appeal Board's ruling, should this Board vacate that part of its earlier order admitting these contentions conditionally, and as we read them, all parties said, yes, that's what you should do.

That is also what we think we should do, and so that 7 brings us to a point where we have taken the Appeal Board order, 8 read it to say conditional admission is not valid, and we then 9 withdraw the prior conditional admission, which leaves us with a 10 group of contentions before us and then I think I'm getting to 11 the point where the parties kind of split off in various directions 12 and maybe I can state very quickly what I understand you to be 13 saying and then I'll give each of you an opportunity to elaborate 14 on that if you wish. 15

The Intervenors as I understand it, Mr. Guild, let's take the ones for the moment that were made -- that were conditionally admitted, pending refinement upon discovery.

19

MR. GUILD: Yes, sir.

JUDGE KELLEY: Okay, and I believe your position is that we should find them to be adequately specific and then allow them in just on their own merits.

MR. GUILD: Our position was at the time they were filed
while lacking perfect specificity, they met the threshold requirements of the admission rule, at the time in light of the information

and documents then available, and that they fell into the category 1 of the types of contentions for which sufficient material was not 2 presented in the then available documents to allow any greater de-3 gree of specificity at that time. They should have been admitted 4 then. They should be admitted now, and the normal discovery 5 process should be used to see whether sufficient evidence exists 6 to support them, to allow them to be litigated at a later stage 7 in the proceeding. 8

9 JUDGE KELLEY: What do you do with the Appeal Board de-10 cision, which, I'm not quoting now, I'm paraphrasing, but it seems 11 to say that the idea of letting in a contention on the theory 12 that more discovery will sharpen it is not acceptable -- don't they 13 say that pretty much in so many words?

REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

300 7TH STREET, S.W.

MR. GUILD: Judge Kelley, we don't read it that way. 14 The way I see it is that the Appeal Board instructs this Licensing 15 Board that no contention will be admitted unless it meets the 16 minimum threshhold of specificity requirement, and we think speci-17 ficity is like beauty. It's in the eyes of the beholder. Obviously 18 some subjects will allow a greater degree of specificity. We 19 think the Board put it well when they observed, for example, on 20 the subject of quality assurance. 21

Let's say defects in plant design or construction. The Applicants are unlikely in their own filing, in this case the Final Safety Analysis Report, to highlight defects in plant design or construction, so only extra document, or extra record imple-

306 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345 13

1

2

3

4

5

6

7

mentation of facts will allow one plead of contention in that area.

For example, Palmetto Alliance #6 which says former workers based on their own knowledge at the site say that there are defects in actual construction, leading us to assert that there are systematic problems with quality assurance. That is the kind of contention that was specific enough as plead, in light of the documents then available.

8 We think that's clearly the kind of thing that the 9 Appeal Board understood should be allowed in, but the judgement 10 of this Board is based on the information then available.

11 JUDGE KELLEY: Were the I & E Inspection Reports on 12 Catawba then available, I assume they were?

MR. GUILD: I --

14 JUDGE KELLEY: That's for information -- I'm not clear 15 about that.

16 MR. GUILD: I don't know. I really -- I can't say. 17 Perhaps so, but the fact of the matter is that this is not like 18 saying the Applicants tell you it's black, we say it's white, and 19 therefore, the issues are joined. The assertion is -- there are 20 no assertions other than the general assertion that we are doing 21 right contained in the FSAR with respect to quality assurance, 22 and therefore, we think it's the kind of contention that lends 23 itself to filing only based on our own knowledge.

24 JUDGE KELLEY: But I just want to clarify this separate 25 point. I think it's a small point, but if for example, supposing

JATA8

20024 (202) 554-2345

D.C.

REPORTERS BUILDING, WASHINGTON,

300 7TH STREET, S.W.

18

1

2

3

some company had some defects in welding, the I & E people came and found them and wrote a big report, wouldn't that be in the PDR?

MR. GUILD: Yes, sir. They would be, in fact something
was distributed to the Board by letter from me concerning an ongoing investigation of various quality control and assurance
matters, and it references previous reports from I & E on those
subjects, back to, I think, '79 or perhaps a little bit earlier,
and those are all available to the public, in the public docket
room I believe.

That's -- I guess the question, you know, what degree of diligence and search is required, if there's some document that sits in Washington, let's say, that the Staff has available, that they say if you knew it existed, if you asked for it by name we would have given it to you, therefore, the --

16JUDGE KELLEY: I was asking whether it was in a PDR in17South Carolina? That's what I meant. Maybe I'm not clear.

MR. JOHNSON: I do not know.

JUDGE KELLEY. Maybe you could check on that and just advise us what the case is one way or the other. Okay, I think I understand your position, Mr. Guild. Let me just -- we like to break this into small pieces. That way it's easier to read the transcript that way. The real question is what do you do now with regard to conditionally admitted contentions that would keep the later discovery -- and Mr. Johnson, the Staff had a specific position

on that. I wonder if you could state it and make sure I understand
 it.

MR. JOHNSON: Well, our position on these matters is that 3 as stated in our response to your questions was that there was not 4 adequate specificity, that was our position at the time, however, 5 we looked at your rulings and felt that there was some ambiguity 6 in those rulings, and in response to your last question on whether 7 you should reconsider or not, we said that to the extent there is 8 ambiguity and you did not decide the question of whether or not 9 they were specific enough on the appropriate standards, that you 10 might want to go back and look, in light of the Appeal Board ruling, 11 however, -- and so it's saying, I think you could reference the 12 -- some matters you said in this March 5th ruling, it refers to 13 transfer and distinguishing these contentions from those other 14 ten contentions, where Staff documents or Applicant materials were 15 involved, here we had references to things that seemed to be within 16 the possession or control of the Intervenors and you've referenced 17 statements that you seem to be referring to information that was 18 in their possession that might make it specific, and our position 19 would be that -- would be limited in ruling now to those matters 20 that were on the record at that time. 21

REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

300 7TH STREET, S.W. .

JUDGE KELLEY: Let me just ask you your reaction to one point. You're in this position now and you issued a ruling six months ago, which said what it said, and then you get in this appeal ALAB-687 and now you're here today and you're looking at--

25

JATA10

1 I suppose you could argue in a sense that it's a prior ruling --2 we all know about specificity, sort of the law in a case or 3 Res judicata and you can't look at it again. On the other hand I 4 suppose you could argue that if you had available to you the 5 advise of a conditional admission, you might look at a contention 6 and say, well, this is kind of vague, but I'm going to admit it 7 conditionally, and wait for the Impact Statement, or wait for some 8 discovery.

9 You might look at it somewhat differently if you had to 10 let it in or let it out unconditionally period, and it just seems 11 to me that arguably at least we're in a position where we're look-12 ing at it in a different context and therefore, it's legitimate 13 to look again. I would suppose that if we said six months ago 14 this contention is so vague it would never get in without further 15 specification. It's pretty hard to turn around and now say, it's 16 really okay, and -- but if it was marginal and I'm not speaking of 17 any of them in particular, but if it was marginal, you might want 18 to take another look I would think. Do you follow me?

MR.JOHNSON: Yes, sir. And I would only like to add one other point unless I'm not being responsive. I didn't understand that you were --

JUDGE KEILEY: They're very long, 300 word questions -the real question is can one put on a different set of spectacles now than one had on before --

MR. JOHNSON: I would agree that you have a different

situation than you had previously.

1

5

6

7

8

JATA11

15

20024 (202) 554-95

D.C.

REPORTERS BUILDING, WASHINGTON,

300 7TH STREET, S.W.

JUDGE KELLEY: Mr. McGarry, would you like to speak to the question of the -- for now anyway, just the ones that pertain to further discovery.

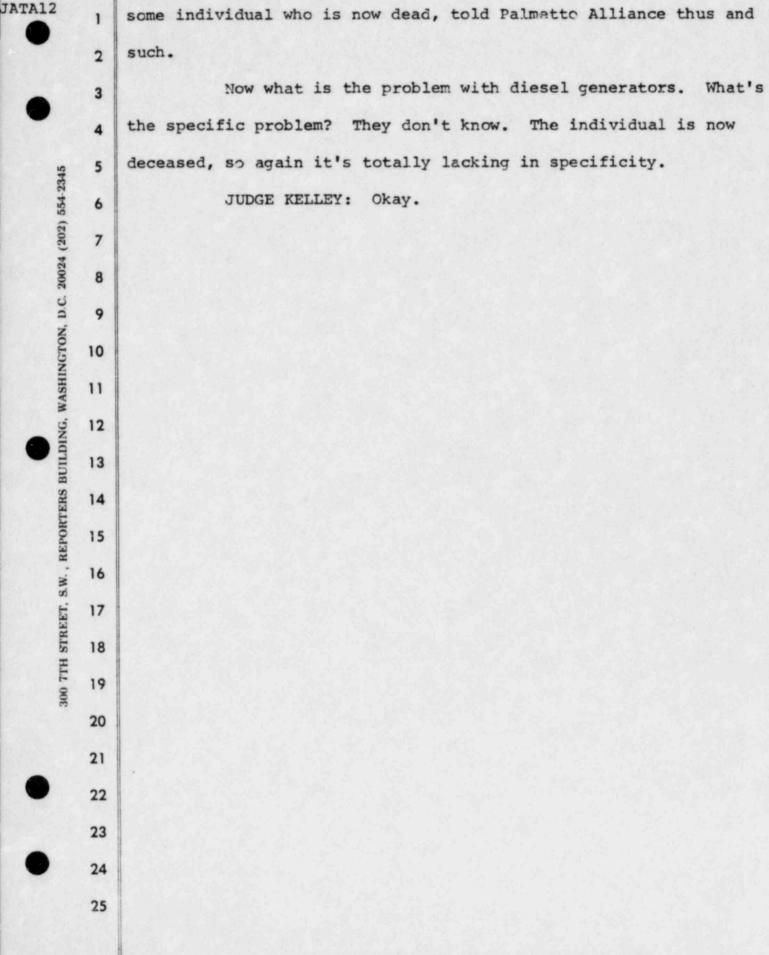
000392

MR. MCGARRY: Our position is clear cut. We maintain that all conditionally admitted contentions, including those contentions which were premised upon further discovery, should be vacated.

JUDGE KELLEY: Because they are actually too vague,
or because we said they were vague six months ago?

MR. MCGARRY: Because you said they were vague six months 11 ago and because they are too vague. We maintained from the be-12 ginning that the contentions -- now we're just focusing on the 13 discovery contentions, but my response applies to all of the con-14 tentions were non-specific. They were vague characterizations. 15 We asked for specificity. Take for instance, the Q.A. Contentions, 16 there are allegations made that there are former employees that 17 had information and that statement was made to this Board, and the 18 Board referenced that statement in the prehearing transcript, and 19 yet there has been absolutely no specificity provided. What are 20 those two former employees' concerns. 21

Absent that demonstration, the contention lacks specificity, the diesel generators is another example. We find out here in the prehearing conference or through discovery that the basis for the contention which we submit is lacking specificity, is that



RA b-1

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

25

JUDGE KELLEY: Okay. 1 Lets turn then to the other contentions. I believe there 2 are about ten of them that were admitted conditionally upon the 3 appearance of another--upon the appearance of some document like 4 5 the Impact Statement. It is unclear to me, Mr. Guild, in reading your most 6 recent filing, the twenty-two or three contentions on the Impact 7 8 Statement. What is your position, what happened to the 10 conten-9 tions that I am talking about now as far as you are concerned? 10 MR. GUILD: Well, sir, we---11 JUDGE KELLEY: Are they before us now? 12 MR. GUILD: Yes, sir. 13 JUDGE KELLEY: Okay, and in what way? 14 MR. GUILD: They are before us in their original format where our position is that they stand as specific enough in light 15 of the subsequent filing of the Staff's DES and we stand by them, 16 17 or they have been revised and are now contained in a revised 18 form in the filing that you have before you of the twenty-three 19 DES contentions; but they are all before you, yes. 20 JUDGE KELLEY: All right, but lets take it one at the 21 time if you will, e old contentions, the contentions of last 22 think we admitted conditionally. You would March, ten of w. 23 an before us for ruling? regard them an 24

000394

MR. Yes, sir.

JUDGE

Y: In light of 687?

RA b 2

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

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

MR. GUILD: Yes, sir.

JUDGE KELLEY: Okay. Then separate from those ten are the new--I will call them "new contentions" if that won't cause you much confusion, on the Draft Impact Statement--lets say Draft Impact Statement contentions which were recently filed.

000395

Now you say that some of the old ones have been revised. The thing I want to get clear in my own mind is, does it really matter? And what I mean by that is don't you have to get in on the basis of new information and if you haven't got new information, you are not in? Isn't that true under 687? So that could be a revision or it could be brand-new, but if it doesn't have new information, it won't be in.

MR. GUILD: Let me take it one step at the time, Judge. First of all, I think in substance it doesn't matter. I think that point we tried to address in our comments in response to your question.

It is really a highly technical matter with probably no substantive effect whether you go back and look at all of your original vague--vague subsequent--vague dependent on document filing of the contentions, the ten, or you hold the decision in abeyance on all of those until some subsequent filing, and the reason why it is not a distinction of substantive import is because the vast bulk of those were environmental contentions, that either--as to which we either offical cut date now because the Staff's Environmental Analysis was filed last month; so, the

bottom line is, Judge, we think that all of those are right for a decision now with few exceptions, and the subject matter that comes to mind as to the exception is the Emergency Planning matters.

You will recall the Board said well, they haven't filed an Emergency Plan. You have concerns on that subject. We can't decide whether they are good or bad concerns because they hadn't filed thei lan yet, so we will admit them conditionally.

The Appeal Board said that was not a proper process. They are either in or out on their merit at the time. We now have the instruction that when that plan is published, we should address it as we have concerns about it and we intend to do so.

But, as to the bulk of the ten, the DES is now out. Either the original pleading of those contentions is satisfactory because of what was filed by the Staff on the DES or we have made revisions and we think those are all right for decision today.

JUDGE KELLEY: Can I make one qualification on that When I say of the draft impact statement contentions, I think. the twenty-three, is it?

19

21

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

MR. GUILD: Yes, sir.

20 JUDGE KELLEY: Okay, the twenty-three. When I say it doesn't matter whether they are a revision or not, in terms of trying to parse it and say this is old Palmetto ten or CESG eighteen, 22 23 why should I care, except insofar as it applies, if there is an 24 ancestry, it probably has some bearing on the argument : is not new information, and that might be of interest, but, what I sort 25

of shudder at is sitting down and parsing all of these and trying to find where everything fits because you don't have such a parsing in your filing, and my inclination is to say except for the argument on new information, I don't care.

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

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

MR. GUILD: Right, my inclination is to agree with you, Judge Kelley, and that certainly is a rather cumbersome task to have to do as you suggest might be required. My only problem is that I am worried that the applicants, Duke Power, are setting a trap for us in this regard and they say well, you have got to have anticipated whether or not the Encyclopedia Brittanica of 1932 commented on this point, therefore, you are charged knowledge of it and should have pled it back then. To that extent, to avoid falling in to this trap, we tried our best to articulate the breadth of our concerns when we first filed our contentions, even though some of them were premature, save these environmental issues, so I agree with you in substance but I hesitate to say there are no points where, because of the argument, that new information is the crux of the matter. We might have to turn back to our original filing to see what we said then.

DR. CALLIHAN: Have you said, Mr. Guild, in effect that we have before us duplicative contentions?

MR. GUILD: That is not what I meant, Judge. I mean it is--if there is a contention that has the same allegations as the one we filed originally and that was filed anew with this most recent filing, it was filed again because it was revised

1 in response to you all's direction and the direction of the Appeal 2 Board as we read it, so duplication in a sense, yeah, that we 3 had to restate a contention in order to speak to the particular 4 analysis that the NRC staff published in the draft statement, 5 yes. 6 Am I responsive? If I can do better, please ---7 DR. CALLIHAN: Well, I think my questions was rather 8 I understood you to say a few moments ago that you are obvious. 9 retaining some Contentions from the filing of last December, or 10 whenever it was. 11 MR. GUILD: Yes, sir. 12 DR. CALLIHAN: Quote "old contentions". 13 MR. GUILD: Yes, sir. 14 DR. CALLIHAN: I also understood you to say that some 15 of those items are re-addressed in the twenty odd contentions 16 filed last month? 17 MR. GUILD: Yes, sir. 18 DR. CALLIHAN: Is that true?

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

19

MR. GUILD: Yes, let me give you an example that comes to mind, Mr. Riley mentioned to me. One of the matters raised originally was Control Room Design in response to the TMI Action Plan. That is not contained in the DES, so we retain that contention and we were told by the Board here we should deal with that matter in more detail when the Company files their specific report on TMI Control Room Redesign, and we are awaiting that report.



2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

20

So, that contention we maintain is still alive because we have not had to revise it, the document has not been published yet, and Emergency Planning is another subject of that.

The only one Environmental contention that comes to mind, Judge, and I--please forgive me if I find there is something else there, but I am trying to be as responsive as I can, is the corbicula, the Asia+ic clam matter. We raised that originally. It is an environmental issue in part because it says the plant capacity factor will be reduced since the cooling water flows will be reduced in essence. We were told to revise it if need be. We think that the record bears us out in our original statement of that contention and we stand by that. That is one example of an environmental matter that we stand on our original filings.

DR. CALLIHAN: I think you have given some examples of non-repetition. Now, is there repetition? Are you prepared to say at this moment or will you be prepared to say later if the question comes up again?

18 Let me just forewarn you, it is going to come up again, 19 I won't demand an answer now.

MR. GUILD: All right, sir.

21 DR. CALLIHAN: But we will come back to it.
22 MR. GUILD: All right, sir, I am afraid it may.
23 DR. CALLIHAN: Thank you.
24 DR. FOSTER: Perhaps I could ask Mr. Guild another question
25 along the same lines here. Relative to the DES, does your new

RA b7

4

5

6

7

8

9

10

11

16

20

21

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

1 filing cover all of your concerns relative to contentions that 2 you would expect to be treated, which are in fact associated with 3 the DES?

MR. GUILD: As to the information as presented at this time in that document, I think our obligation in fairness is to respond within the 30-day time frame that you gave us, and we did so.

I am informed that there are several portions in the DES where the staff says Applicants haven't made a filing on this subject yet and we will address it in our final statement.

It comes to mind for part of their Severe Accident Analysis 12 is premised on an analysis yet to come of the Emergency Plan, and 13 to analyze actually how many people will actually be moved out 14 of the way of the plume in the event of a severe accident. They 15 said you can't do that completely because the plan is not yet published. To that extent, there will be a revision of environ-17 mental matters at some later time, either a supplement to the 18 DES or in the FES. Of course, if it is new information then, 19 we would like an opportunity and ask an opportunity to respond; but as to everything that is contained in this document, Judge, we think our obligation was to address it and we think we have, 22 so you have everything that we have concerning this document and 23 what's available now.

24 JUDGE KELLEY: Let me just make one qualification to 25 my earlier statements about relationship between the old contentions

the old ten and the new twenty-three, and I had suggested that analytically it doesn't really matter whether one of the new twentythree is the son of one of the old ten, because you can come in with a new contention, based on new information, and it doesn't matter whether you filed one earlier, if it is really new. I didn't mean to suggest at all -- in fact, quite to the contrary -that we are not interested in knowing what's knew about these twenty-three contentions, that's crucial. It is the only way you can get any of these in, as I understand the law, and I was a little disappointed not to find in your pleadings any indication of where the new element was to be found. I think when--I guess it is partly our fault -- if I had it to do over again, we could have a format that would say contention and explanation of why this is new. We didn't say that in so many words, but, nevertheless, the Appeal Board decision 687, I think, makes it incumbent upon somebody who does offer a contention late to either explain why it is new or certainly be prepared to explain why it is new, so that we can decide whether it is admissible, and as we do get into this contention by contention discussion probably fairly

000401

soon, maybe your lead-off or early comment might be what element in this contention was first disclosed in the Draft Impact Statement.

Well, we went on at some length on that. I was really trying to get a summary of positions from each party on, in this case, the ten. Maybe the staff could just state its position

ALDERSON REPORTING COMPANY, INC.

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1 and, with that, we can move on.

b9

300 7TH STRE' T. S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

000402

2 MR. JOHNSON: I would just focus on two things. The 3 first is under ALAB 687, the disposition of those contentions 4 is left open on remand and reconsideration by the Board. There-5 fore, in a sense, even though you are required to follow their 6 directions and vacate the original admission, in a sense they 7 are still floating around here somewhere, and at some status 8 we will have to dismiss or admit them, so in a certain sense, 9 they are still around.

JUDGE KELLEY: They are not ruled on yet, isn't that right? The only ruling we have made is gone.

MR. JOHNSON: In a sense, I would agree with that. On the other hand--

JUDGE KELLEY: In what sense are they ruled on? Just like A-1 as far as I can tell. But go on, go ahead.

MR. JOHNSON: Secondly, I think there is a sense in which the law of the case has been established by your own order requiring that any DES or any environmental contentions be either submitted or revised. The original contentions be revised with particularity, based on the new information in the DES or be considered withdrawn. In other words, that was your directions to the Intervenors and it seems to be that that is the guidance which you have established and since they offered what they considered to be their--the contentions, using their words in their pleadings, it seems to be those are the things before us

RA bl0 1

2

3

4

5

6

7

8

9

10

12

13

14

15

16

18

19

20

21

23

24

25

300 7TH STREET, S.W., REPORTERS BUILDING, WASHIN 3TON, D.C. 20024 (202) 554-2345

on environmental matters and as you said, they are either revisions or they are not and those are all that's before you it seems to me and anything that came before has to be considered either revised or withdrawn, and if it wasn't revised by those--what we have before us now that was recently submitted, they should be considered withdrawn.

000403

JUDGE KELLEY: But if they are withdrawn, it is a voluntary act of the author or, correct?

MR. JOHNSON: Okay.

JUDGE KELLEY: As normal use of the term, and Mr. Guild says he hasn't withdrawn. 11

MR. JOHNSON: What I understand your order originally to be is that you directed them to withdraw if they didn't revise this.

JUDGE KELLEY: Oh sure, if the world had gone on like we all thought it would or like some of us thought it would. Others were convinced the Appeal Order reversed this and in part, 17 they were right, but you can say I think that 687 is something of a supervening event which says, no, that is not the way the world works, it works this way, and that leaves open, I suppose, the possibility that you look at the old contention and decide whether it is too vague or not, for one thing. I think it said 22 we could do that with regard to the discovery contentions. Right? MR. JOHNSON: Yes.

JUDGE KELLEY: Okay. A lot of this discussion can get

b11

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

pretty academic and if, in fact, the Intervenors have really revised most all the things they care about, then it is not going to matter very much, but--it would interest lawyers but nobody else--but, anyway, I think I understand your position.

Okay, Mr. McGarry what about the ten?

MR. McGARRY: Like the six, we maintain that they all should be vacated pursuant to ALAB 687. We maintain that from the outset these ten contentions lack specificity. You had asked Mr. Johnson in what sense it had been ruled on, I maintain our view of the rulemaking made on March 5 is a determination that the contentions lack specificity, but you are the judge of that determination. However, I emphasize that if you do go back and look at the contentions both these ten and the other six that we stand on our pleadings of December 30th, it speaks for the lack of specificity.

We also would like to re-emphasize in clear understanding of ALAB 687 and that is that it is incumbent upon a party seeking to raise contentions at this time to address essentially two sets of factors. Three factors speak to the newness of the document. Was the document available and the Appeal Board sets those documents out.

If that test cannot be adequately satisfied, then one reaches the five factor test and that is the lateness test, and with respect to the filing of the DES contentions, neither one of those tests were addressed.

-	1	JUDGE KELLEY: We can stipulate, can't we, that there is
bl	² 2	no attempt to meet the late filing, isn't that correct, Mr. Guild?
	3	MR. GUILD: If that test is applicable, Mr. Kelley,
	4	we are prepared to meet it.
345	5	JUDGE KELLEY: But you haven't done it to date, sitting
20024 (202) 554-2345	6	here this morning, there has been no attempt to justify the
4 (202)	7	MR. GUILD: Judge, you told us to file contentions
. 2002	8	addressing the DES and we did so, and we think that, you know,
N, D.C	9	supervening events, the express order of this Board, and common
VASHINGTON,	10	sense reflect that we did what we were told to do and if it were
NASHI	11	required to do anything further, we are prepared to do that.
6.	12	

JUDGE KELLEY: I don't mean to find fault, Mr. Guild, I am just asking you whether you have addressed the five lateness factors, do you think the answer is no?

> MR. GUILD: I think the answer is no. JUDGE KELLEY: Okay.

300 7TH STREET, S.W., REPORTERS BUILDIN

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. McGARRY: And we just went around the circle, we would maintain that ALBA 687 is clear and I think we have addressed that point. It clearly spells out that the Intervenors have an ironclad obligation, there is no mistake.

I would like to comment on the setting the trap observation of Intervenors. I don't want to get--I hope this hearing is not going to stoop to that level. We aren't setting any trap for the Intervenors. We are simply following the rules and we will continue to follow the rules and preserve the positions and

2

3

4

5

6

11

13

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

fight for the positions that we think are supportive of the rules. With respect to contentions that fall in the category that we are now discussing, but do not involve the DES, that is the Emergency Plan contentions.

JUDGE KELLEY: Yes.

MR. McGARRY: The Control Room Design contentions, we maintain all those should be vacated. Again, we stand on our --7

JUDGE KELLEY: Let me ask you simply to do this, at 8 some later point, could you raise that again as sort of a separate 9 point, and I just want to make sure we set it apart and don't 10 get it all tangled up in what we have been talking about. Okay. 12 I will make a note of it, too.

MR. McGARRY: And I believe that's our comments.

JUDGE KELLEY: Well, that, I think, tells us your position 14 pretty fully on where we stand on the 687 and what we are supposed 15 to do with the old ten and the old six and brings us around to 16 the Draft Impact Statement, twenty--twenty-three, in the contentions 17 and I expect we will spend a lot of our time today talking about 18 19 those. We will have to rule on one by one.

20 In some preliminary discussion we did, following my 21 reading of the papers, come up with a few sort of generic points 22 that we felt we might raise at the outset and get some comment 23 from you to provide a sort of framework for the later discussion. 24 First of all, a sort of obvious point, the staff in

25 writing this Impact Statement is not in the business of writing



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

an encyclopedia. They have a very difficult job and I won't extend these comments except to say it is supposed to be a concise digestible document which somehow comes to grips with a very complicated subject, preferably in less than a hundred pages or so, so that it is supposed to be accurate and balanced and objective and they tried to do that and at any rate, we will go through and knitpick it and we don't propose to litigate footnote type points about this document. It is supposed to be sort of an overview as we understand it and we look at the contentions from that light.

Secondly, and I don't mean to denigrate these at all, we do have some contentions which struck us as essentially stylistic in nature. That is to say, it may well be helpful to the draftsman in the final Environmental Statement, but they are really not litigable.

There is a contention--I believe it is number 4--about some confusion possibly arising between metric and English-type numbers and that may well be, but it is not anything that we think is appropriate for litigation. It may be appropriate for discussion between the Intervenors in their role as commentors on the Impact Statement and the drafters of the statement.

In that regard, I want to ask the Intervenors to -and I am not--Mr. Pressler, I will get to in a minute--with a somewhat smaller piece of business to be dealt with and we might get to you first so you can go on if you want to, but I am referring



300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

1

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

to the 23. There are some contentions in there and I won't attempt to number them, but I will ask you to look them over and see whether you don't see on reflection they are really more appropriate as stylistic comments than contentionable points and if so, we need not spend a lot of time discussing them today.

A problem that we see coming up in the application of 687, we have used the phrase, new information; and the phrase in 687 it sort of jumps off the page and gets quoted a lot is "wholly dependent" on some of the documents and then one readily gets into a discussion about just what does that mean? The staff does some analysis of it and offers some analysis, takes a position on its preferred use and, as we talked about it, it seemed to us that you might be able to come up with a sort of range of approaches to what "wholly dependent" ought to mean in this context.

We frankly have an open mind on it. I didn't see any citation of cases in the papers filed. I don't know that there is any existing wisdom on this beyond what one can infer from 687, although the notion of new information in filing right contentions has been around for awhile. If any of you can point us towards some body of NRC law and point that out, I would appreciate that.

I suppose you could take a spectrum of positions where by on the one hand if you wanted a rule of law that made these contentions rather exceptional, you might say that "wholly



1

3

4

20

21

22

23

24

25

dependent" means something like the whole subject matter is brandnew and the whole thing appeared for the first time in the Staff's Draft Impact Statement, and since that wouldn't happen very often, I assume, then it would be a rare contention that would get in, except by jumping over the late contention hurdles.

ex 9 ex 10 ex 11 ex 12 ex 13 ex 14 ex 15 ex 15 ex 16 ex 17 ex 17 ex 17 ex 18 ex 19 ex 19 ex 10 ex 10 ex 10 ex 10 ex 11 ex 12 ex 13 ex 14 ex 15 ex 15 ex 16 ex 17 ex 17 ex 17 ex 18 ex 18 ex 19 ex 19 ex 10 ex 10 ex 10 ex 11 ex 11 ex 12 ex 13 ex 14 ex 15 ex 16 ex 17 ex 17 ex 18 ex 18 ex 19 ex 19 ex 10 ex 10 ex 10 ex 11 ex 11 ex 12 ex 13 ex 14 ex 15 ex 16 ex 17 ex 18 ex 19 ex 10 ex Conversely, I suppose the duty is here, because even a little planning element that's new as far as contentions, that's enough and then that is a very liberal, from Intervenors standpoint and then it gets a lot of contentions in. You can probably get into debates about whether it has to be information in the sense of hard data, hard facts or whether it can be staff analysis, some new thought that the staff seems to have had, and these are just suggestions of some of the things that are troubling We don't know the answers and as I say, I think we have us. some discussion from Mr. Johnson, but we would like to hear from you on that point.



1

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

25

360 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

Well, surely it's something you've thought about at great length, you've written all these papers. So why don't we just ask 2 you at this point -- Mr. Guild, can you state a position on this 4 problem? What does it take to be wholly dependent?

MR. GUILD: I would like to respond to that. Mr. Riley asks if he'll have an opportunity to speak on these subjects as well, or if he should assume that his opportunity goes with me.

JUDGE KELLEY: I'm sorry, I didn't mean -- I guess lawyer to lawyer type stuff -- Mr. Riley, I don't mean at all to I realize you're a separate intervenor and -- sure.

MR. GUILD: Yes, Judge Kelley, first let me say that lawyer to lawyer amongst ourselves, we've sort of recognized that we're on some rather new ground here and that the Appeal Board speaking through ALAB 687 on the subject of how contentions are filed and initiated in contested cases before the Nuclear Regulatory Commission is one that is sort of startling to be elucidated at this late date, after all of the water in licensing has gone over the dam over all these many years.

19 That reflects, it seems to me, just how much of a moving 20 target we're dealing with here on the tasks that are set before us, 21 the standards that we're being asked to meet. The "wholly 22 dependent" language is one that sprung forth within the last 23 month and a half, it didn't pre-exist, to my knowledge, in any 24 NRC case law, rules, regulation or practice.

So, we are kind of formulating this process as we go

C2pw

along. That said, it seems to me that we can only really address
 these analytical problems in the context of where we find ourselves
 today, and that is with the staff's Draft Environmental Statement.

In that context, it seems to me that the intervenors are addressing one of the -- the agency's action that is fundamental to licensing this nuclear power plant to operate, that action is required under the National Environmental Policy Act and it is the agency's initial, preliminary decision that the benefits of licensing this facility's operation outweigh its cost, environmental and otherwise.

We take issue with that conclusion in specific respects 11 -- 23; some of which are weightier than others, some of which are 12 more important than others in our view, but all of which in one 13 form or fashion take issue with the analysis as presented to us. 14 To that extent, Judges, the DES contentions that we've presented 15 to you are implicitly wholly dependent on an analysis that did 16 not pre-exist. The DES came out in August, it didn't come out 17 18 before, there was no environmental analysis at the operating license 19 stage before that, and so none of these matters could be joined effectively before that. And that's the import, I think, of your 20 21 earlier decision about the ten contentions being premature, in 22 effect.

We think that we've tried to go beyond simply saying,
as I just said, that this addresses the DES and therefore it's
all new. We've gone beyond that in this regard, we've, where

ALDERSON REPORTING COMPANY, INC.

554-2345 BUILDING, WASHINGTON, D.C. 20024 (202) 300 7TH STREET, S.W., REPORTERS

C3pw

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

important, addressed specifically how the staff's analysis in the DES at the operating license stage differs in material terms from their analysis of the Final Environmental Statement at the construction permit stage. We think that is a significant point where we've attempted to shoulder the further burden of saying this is new information.

Now as another general point on the new information question, we think that it's inevitable in a complex subject such as this where either the proceeding before the Commission or its predecessor agency goes back many years or the fact of construction of this facility goes back many years -- and both of them do --that many facts will pre-exist the filing of our latest supplement containing contentions. It's inevitable. The plant existed and was being built years ago. There were licensing actions years ago.

So to the extent that it is simply a matter of the Applicant saying ah ha, ten years ago we talked about the issue of reactor vessel metal standards, there will always be pre-existing information. The central point, we think, right now that faces us is the staff has committed itself to the environmental analysis, and it did that last month, and we promptly responded to it per your direction with our critique containing our new contentions.

JUDGE KELLEY: Well it's true that documentation goes back a long ways, even before the CP. I asked myself that very question this morning when I looked at 637. My question was do I have to read the CP stuff, and the answer seems to be yes, you do.

ALDERSON REPORTING COMPANY, INC.

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

C4pw

5

6

7

8

9

10

11

12

13

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

I don't see any other way to read this. That's the ironclad
 obligat'on, isn't it? We're supposed to read all that material.
 It's a lot of stuff I grant you, but that's what it seems to say,
 it's available.

MR. GUILD: Well, sir, I think -- let's put it back in the context of a long series of authorities before the Commission that say first the premise is this; the contention, including the basis and specificity requirement is analagous to peading in civil cases. It's not exactly the same, but it's analagous to it. And the similarities and distinctions are highlighted. I don't have the specific case cite in front of me, but there are a number of Appeal Board decisions that say very clearly why it's like that and why it's different.

14 It's like that in the sense that pleading performs a 15 certain number of functions. And Mr. McGarry, in his pleading, 16 quotes the case I had in mind and says, you know, here's what it 17 does. To paraphrase, it provides the other side notice of what 18 they have to defend against and narrows the issues for trial, 19 let's the tribunal -- you Judges -- know what it is you have to 20 decide, so that we don't raise issues that are, let's say, policy 21 matters not suitable for litigation in this individual case. It 22 does those kinds of things.

Put in that context, sir, you have to consider -- and all the authorities about the specificity and basis requirement flow from this proposition, consider the position a litigant finds

C5pw

1

3

4

5

6

7

11

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

himself in in any other case, and when you seek to amend the pleading in the way that the late filing requirement talks about 2 amending your contentions to add new material or revise old material, you put it in the context of the burden that would be faced by any litigant.

000414

Now I think put in that context, the wholly dependent language or the due diligence language or the ironclad obligation 8 language has to be considered under a rule of reason. Now if you're 9 going to hold intervenors to the standard of having read and 10 digested every conceivable piece of information that is publicly available in the sense that we could get it if I committed a year 12 to reading every piece of paper that's ever been filed publicly 13 about this plant or that is available under the FOI or that, you 14 know, could otherwise be received if I asked the staff to give it 15 to me, then you will never have a contention that's new -- never --16 because no one can meet that burden, sir. And we maintain that 17 given that rule of reason and the authorities about why this 18 pleading requirement is made the way it is, analagous to pleading 19 in civil cases, we think that you have to set a rule of reason and 20 that rule of reason is met by reading the key documents, and those 21 are the FSAR, you identified that as something we're obligated to 22 read. We disagreed with your view at the time and frankly 23 suffered as a consequence of disagreeing with that. There are 24 points where you said we didn't look at it closely enough and we 25 had contentions dismissed for that reason.



300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

11

15

17

18

19

20

21

But we think the DES is a fundamental document, we have 1 to address it, and we think that the record that has been built at 2 this stage of the case are things that, you know, we're charged 3 with knowing about. Beyond that, on a case-by-case basis, I think 4 we have -- should have a fair opportunity of saying to you that's 5 just not reasonable to say we should go back and look at that. 6 And frankly, when we looked at the CP Final Environmental Statement, 7 my view was we were going above and beyond the burden that we 8 face in addressing the operating license Environmental Study, but 9 I think we did so to show you these are important matters. 10

JUDGE KELLEY: I'm not -- I understand the point that you're making and there is merit in your position, I'm just 12 concerned as an implementor of 687 that I do what I've been told 13 And the language on page 13 seems to impose a very, very 14 to do. high standard of reading and studying. We, the Licensing Board, can't guarrel with that, we just apply it as we read it. 16

Are you saying in effect that you don't think that an intervenor is charged with knowledge of the CP documents, for this purpose?

MR. GUILD: Yes, sir. Unless there are some other circumstances that puts that intervenor on notice of that document.

22 JUDGE KELLEY: Is it possible for you to single out a 23 test for new information that -- well, maybe it's not -- but 24 single out a test which says, for example, so lon as a single 25 element of the contention is really new, the fact that the rest

C7pw

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

17

1 of it has been around before doesn't disqualify it. Would that be 2 your position, or something like that?

MR. GUILD: I don't want to advance an overly technical 3 view because I really think it's dependent on -- you know, the 4 bottom line, Judge, is is this an important issue that bears on 5 the agency's licensing responsibilities, is this an issue that, 6 7 you know, should be of concern when you say crank that plant up. And I'm not interested in nitpicking, my client is not interested 8 in nitpicking, we're interested in presenting for litigation 9 important concerns that we have. And I guess I'm asking you to 10 say, you know, let's apply a rule of reason, a rule of, you know, 11 good public policy when we consider this stuff as opposed to saying 12 13 -- I'm not prepared to say if they changed the punctuation, that's 14 new, and ask you to rely on that overly technical view of things. 15 I don't think that gets to the real point that we're here to 16 address.

JUDGE KELLEY: Okay, fine, that's helpful.

18 Mr. Johnson, you did address this, as I mentioned
19 before. Maybe you could just restate it and we might have a
20 question or two for you about the staff's position on it.

MR. JOHNSON: All right. Our position was that we should look at the ALAB decision in its entirety, and the requirement to present new information should be read in the context of the so-called ironclad obligation that's referred to in the ALAB 687 decision on page 13, and if a person, an intervenor, pleads

C8pw

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

something is inaccurate or inappropriately stated in the DES, the 1 2 mere reference to the DES on a matter that was contained in previous 3 documentation isn't enough to carry today. That the function, the 4 purpose of this pleading requirement was to assure that the 5 opportunity to plead contentions under the statute was available, 6 and it seems to me if you look at this decision on that level, you 7 will see that the broader the matter that is being raised, the 8 more likely it is that they could have addressed it earlier. I 9 won't go into specifics, but the more general the statement, the 10 less specific the contention, the worse the contention is on the 11 merits, the more likely it could have been raised earlier. The 12 more specific the contention and the more it is dependent upon 13 information or statements that are just contained in the DES, the 14 more likely -- well, in the case before us it didn't lead to new 15 contentions either, but the more specific the contention the more 16 likely it is also, not only to be timely but to be a good 17 contention. For example, some examples that I was thinking of that 18 are wholly dependent upon -- might be considered wholly dependent 19 upon the DES are, in this situation, some of the worse contentions. 20 They aren't contentions at all, it's nitpicking types of units of 21 measure were confusing. I agree, that's wholly dependent upon the 22 DES but yet it doesn't fall of the category I was saying, but if 23 it's some item in which new information was contained in the DES 24 and it was a very important matter and it's focused upon, then it 25 seems to me you would have a situation where even though the



4

5

6

7

8

9

10

300 7TH STRETT, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

general subject matter might have been addressed somewhere in some
 previous document, that the role that the DES plays might, in a
 balancing situation, weigh in favor of admission.

JUDGE KELLEY: Excuse me.

(Brief pause.)

JUDGE KELLEY: Mr. Riley -- let me think a moment about sequence -- can you hold just a minute?

MR. RILEY: Sure.

JUDGE KELLEY: I'll certainly get back to you.

(Brief pause.)

JUDGE KELLEY: I wanted to ask you, Mr. Johnson, I'm 11 looking at pages 5 and 6 of your staff statement of position on 12 the contentions and you discuss in that section this problem and 13 see some ambiguity in the Appeal Board's decision. By the way, 14 I would take it that although the Appeal Board's decision is 15 certainly pertinent here and entitled to respect in the question, 16 17 this is not a case where the Appeal Board really faced this question and spelled out what they meant. They didn't say "and 18 19 by -- whatever that phrase is -- wholly dependent, I mean"-- and give us a paragraph of help along those lines. It isn't here. 20 21 So we can use some common sense, as well as you have here, as well 22 as just words on the point, the words "particular subject", that's 23 out of 687, at the bottom of page 5, "particular subject could not have been advanced". Can you put a little of flesh on the concept 24 25 of "particular subject" and maybe examine that a bit? I'm not clear

1 what that means.

C10pw

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

MR. JOHNSON: Well, the subject that comes to mind in 2 the particular contentions we have before us was, for example, 3 cooling tower drift where the question of the acidity and alkalinity 4 of substances that are in the water that's being -- the blowdown, 5 and whether there wou'd be chlorine gas or sulphuric acid in the 6 drift, it seems to me that that is a subject that has been a 7 subject -- well, first of all, it's a general matter that's 8 9 dealt with in each licensing proceeding; second of all, it's a 10 subject matter that in general and in this particular case is 11 dealt with in the FES and the CPC, and also addressed in the environmental report of the applicant. And therefore, the subject 12 13 matter of the acidity or the contents of the balance of the drift 14 is a matter that is well before everyone by this point. And so 15 the subject matter is a subject matter that they could have dealt 16 with.

17 JUDGE KELLEY: Okay, but suppose, to take your 18 example, drift from the cooling tower. A contention that eventuates 19 from the intervenors' side is on that subject and has in it three 20 or four elements -- well, let's say four, three of them have been 21 around for a long time, everybody knows that or ought to; but there 22 is something new about blowdown that the staff found out about and 23 put in their Draft Impact Statement for the first time, at least 24 in this case. My question is, does the subject matter test, if I 25 can call it that, particular subject matter test, mean that everything



4

5

6

7

8

9

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

1 has to be new, or might it be enough that some significant element
2 of the contention is new?

MR. JOHNSON: Well it seems to me that if the new element is significant then that might be enough because it seems to me in order to put any sort of idea, any sort of contention into context, you may have to include things that are already known before the DES; however, it's a question of how important is that new item. You know, does that in itself form a basis for a contention.

JUDGE KELLEY: An important new element, which is only one part of the contention, might be an adequate justification for a contention.

MR. JOHNSON: Yes, and by contrast, if you basically reiterate things that you could have found verbatim or in substance from another document and just say this is not adequately analyzed in the DES; that is obviously not a substantive new point that has been raised.

18 JUDGE KELLEY: Let me ask you a question about this 19 notion of analysis and maybe Mr. Jabbour could comment on it too, 20 or perhaps both of you would, I'll leave it up to you, but -- a 21 layman like myself might want to distinguish between the facts and analysis and the cooling tower blowdown, I've got lots and lots of 22 facts but perhaps the staff would come up with a new model or some 23 24 new method or some new way of looking at all these facts; can some 25 analytical new element also justify a contention as opposed to just

Clinw 1 data

2

data, in your view? Or is that an artificial distinction? I'm not entirely sure that it's not.

3 MR. JOHNSON: It's hard to deal with that in the abstract 4 but it seems to me it depends on the importance of the matter 5 being addressed. If it's a requirement that the staff analyze a 6 particular matter, for example the environmental consequences of 7 severe accidents pursuant to the Commission's policy statement, 8 you might want to address the adequacy in terms of what the 9 Commission stated the staff was required to do. In that case, some 10 of the -- in fact, a large part of what was required is an analysis 11 -- in the nature of an analysis, contents of an analysis, and it 12 addresses methodology as a requirement, and I suppose that you 13 could measure a contention of that sort to basically say that the 14 analysis itself is a new element.

JUDGE KELLEY: Mr. McGarry, thoughts on the subject of "wholly dependent"?

17

15

16

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

MR. MCGARRY: Yes, sir.

We agree with the Board that ALAB 687 has indeed set a high standard with respect to the ironclad obligation of establishing a foundation, the initial obligations for intervenors to search out available evidence and, for example, contentions. If thereafter they file new contentions, we must look to wholly dependent.

We think there has been some guidance given by the Appeal
Board and we would direct your attention to page 17 of the Appeal
Board decision. I make reference to the bottom paragraph. It starts

C13pw

3

4

5

6

7

8

9

300 7/7H STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202, 554-2345

out, "In sum, in the instance of a contention that was susceptible 1 of filing " -- you have to ask yourself that, was this contention 2 susceptible of filing within the period prescribed. We go down toward the bottom, five or si> ; ines from the bottom, the sentence begins, "Where, however, the non-existence or public unavailability of relevant documents made it impossible for a sufficiently specific contention to have been asserted at an earlier date " Those are two pieces of wisdom that the Appeal Board has shared with us with respect to "wholly dependent"

I'd just like to, I think, perhaps follow up your 10 discussion you had with Mr. Johnson, so you get our view. You 11 postulated or hypothesized an incident where you have a contention 12 that has three existing facets to it and then a new fourth one; 13 our position would be the contention would then be a new contention, 14 but it would be limited to facet four. Facets one, two and three 15 were existing information and unless they're critical to the 16 entire contention, I'm assuming that there are problems with the 17 cooling tower because of A, B, C and D. Our position would be 18 A, B, C and D could have been raised, if one had looked at the 19 CP FES, because they're addressed there, or look at the FSAR or 20 whatever, they're addressed there. But if indeed element D is 21 new, then I think that would come within the meaning of what the 22 Appeal Board meant by "wholly dependent". 23

JUDGE KELLEY: I don't know that we disagree, these 24 things are hard to talk about in the abstract. I was simply 25

C14pw

3

4

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

11

15

16

positing that you usually need three or four facts to state a 1 contention. Now you're positing two or three problems and a fourth 2 problem.

MR. MCGARRY: That's right.

JUDGE KELLEY: Maybe the problems are old hat and you 5 6 don't think --

7 MR. MCGARRY: No, we can just look at the contentions we have before us. I'll give you a for instance; this is not 8 necessarily the DES but it just comes to my mind, severe accidents. 9 There are four examples; loss of power, ATWS, fatigue failure and 10 stud bolts. Now this is off the point of ATWS -- off the point of 12 the DES but they're four facets and three of those have already been discussed at length but one of them had never been discussed 13 14 before. Then severe accidents would come in, but it would be limited to the one that had never been discussed before. That's our position.

17 Now second of all, you asked about -- facts haven't changed 18 but there's a new analytical model. Our position on that would be if 19 the subject matter was known, then it should have been filed 20 earlier. Now that's our general feeling. We would acknowledge 21 there could be some distinctions drawn, but as a general proposition 22 the very fact that the staff chooses to now use another model but 23 is still using the same facts, we maintain then the subject matter 24 that would be the basis of the contention was known well in 25 advance of the filing date.

14

19

20

21

22

23

24

25

EndC

1

3

4

5

7

C15pw

Two other points, since I do have an opportunity to speak. 2 The intervenors indicated that if they were obliged to search all the relevant information, the suspect that they would never be able to justify filing a new contention. Well, that begs the question. If they had fulfilled their ironclad obligation in the first instance, they wouldn't have to worry about whether or not a con-6 tention was new. That's not a relevant consideration in the first 8 instance.

9 Second of all, there may be some confusion with respect 10 to drawing analogies between the practice that one has in federal 11 courts and state courts and the practice that we have here. This is not a notice practice proceeding. There is a specific -- there 12 13 is a specificity and basis requirement imposed.

I think that concludes the comments we have.

15 JUDGE KELLEY: I'm going to give Mr. Riley a shot, but 16 it's twenty after eleven, we've been sitting here for awhile. Why 17 don't we take a short break, ten minutes, and come back and maybe 18 go 11:30 to 12:30 and stop for lunch around that time.

(A short recess was taken.)

1

2

JUDGE KELLEY: Back on the record. Did you finish? MR. MCGARRY: I have one further point. The last observation we had with respect to the definition of wholely dependent, we would just ask you to bear in mind that the Appeal Board used the word wholely. They could have just said is it dependent upon new information. They didn't say that. They said is it wholely dependent on new information, and in observation, I would ask you to consider that.

JUDGE KELLEY: Okay. By way of upcoming agenda, why don't we turn to Mr. Riley and ask for his observations on these new topics we've been talking about and then we'd like to talk about Mr. Pressler's contention and finish that up -- I think we probably can before lunch, and we might even spend a few minutes before lunch talking about scheduling. We'd like to get an updated revised idea as to where various documents are for the record.

So with that, Mr. Riley, you want to go ahead?

MR. RILEY: I think there are some distinctions that need to be made that have not been made in our discussions here. One of the distinctions is that between information impulse and evaluation or weighing or judgement. Now if we go to the Environmental Protection Act, it charges some agency of government with accumulating information and making a weighing or balance of what it applies. We do not think that burden is on the Applicant.

24 It certainly isn't charged with that burden under the 25 Environmental Protection Act. By earlier decision,

9

10

11

JAT

I have reference to the CALVERT CLIFFS Decision, Judge J.SkelleyWright 1 the Agency, the AEC and the successive N.R.C. are charged with this 2 burden of making the weigh and balancing. Our 23 contentions are 3 wholely dependent upon the Draft Environmental Statement because 4 not only do they embody information much of which is in the 5 Environmental Report, though not all, but we are seeing what their 6 judgement or their balance is on it, so from my point of view, the 7 game started when we received the DES. 8

> I have a few additional comments to make. JUDGE KELLEY: Let me just ask you a question. MR. RILEY: Yes, sir.

JUDGE KELLEY: It's true enough that the Staff and NRC 12 ultimately has to make the judgement, but let's suppose in a 13 particular case, a particular thing to look at -- blowdown-- let's 14 say, the ER filed by the Applicant makes a conclusion and it says 15 it won't have any significant effect on the environment, along 16 comes the Staff and says exactly the same thing. Is the fact that 17 it's the Staff's judgement enough to set it apart from the earlier 18 ER in your view? 19

20 MR. RILEY: Absolutely, in accepting a wrong statement, 21 and I think that any judge of scientific peers would conclude that 22 there are wrong chemical statements, Draft Environmental Statement, 23 those referenced in our contentions #2 and #3, the Staff has 24 committed itself to an error and certainly should be challenged 25 I see it, as a contention in this litigation.

If the Staff commits itself to an error, even though its
 language is identical to the ER, as far as we're concerned is the
 -- they said okay, and they did it.

JUDGE KELLEY: I understand your position.

MR. RILEY: I would like to add another comment with respect to the use of the word consider. We'll probably be getting into this later in the Staff's point by point argument against accepting any of our 23 contentions, but only too frequently it uses the word considered but it doesn't tell us what that consideration was in the DES. They considered it but we never saw the paper, and as far as the public is concerned, I think that's a very unsatisfactory form of consideration.

One other comment I have to make has to do with the way 13 we consider parts of a thing. Let's say that somebody is follow-14 ing out a recipe, some dish at a meal. The recipe has a revision 15 and only one part of that recipe is revised. It's the salt that's 16 added.' It may have been far too bland the first time. May be 17 far too salty the second time. The point is that that one element 18 interacts with the whole picture, and if you've got more sulphuric 19 acid in that thing than -- in the cooling system water than you 20 should, you are liberating chlorine and you wouldn't have before 21 22 and that's an extremely significant change though other elements are still as they were. 23

I also would like to make one comment about knit-picking and that is this. One can say that we are critical of the style

ALDERSON REPORTING COMPANY, INC.

D.C. 20024 (202) 554-2345 300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON,



4

5

6

7

8

9

10

11

12

JATD:

JAID4

REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

300 7TH STREET, S.W.

1 of the shoes in writing the Draft Environment Statement, but one 2 can also pick it up from a different aspect and that's the 3 sematic aspect. If somebody is reading over a huge volume of 4 material, as I catch it, 0.3 cubic meters per second .3 something, that's not very much. On the other hand if the language is 5 6 25 million pounds per day, whatever the corresponding amount would 7 be, that has a very different impact on the reader, one thinks 8 twice about that, and I think that very definitely that is a 9 sematic element to this in terms of the way that presentation is 10 received, so I don't think it's knit-picking to say that for com-11 parisons of say, water flow, that the same status -- it's not 12 a question metrically for english, but the same uniform standard 13 be used every time that particular subject is brought out. 14 Thank you.

15 JUDGE KELLEY: That may be -- your last point -- it may 16 be a useful comment maybe in the way it's written should be im-17 proved upon. One point I was making, and would make again, however, 18 that it's not something that we're going to make a law suit out of 19 as far as I can see. You can reach the point where an Impact 20 Statement is written in such a convoluted unreadable fashion, 21 that it's just not -- it just doesn't communicate. I don't under-22 stand you to be making a contention of that sort.

MR. RILEY: None whatsoever. As a matter of fact, in a
private conversation yesterday, I told Doctor I thought
it was extremely well written and well edited, but it's some of the

REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

300 7TH STREET, S.W. ,

1

2

content I disagree with.

JUDGE KELLEY: Okay.

MR. GUILD: Judge Kelley, I wanted for the record if I 3 could, to supply a citation, a case I had in mind, that I referenced 4 earlier. That's the Allen's Creek Decision ALAB-565 10 NRC 5.1 5 and the analogous to pleading in Federal Court reference and most 6 directly references the Federal Rule 8(a)2 which says that the 7 initial pleading is a short and plain statement of the claim, show-8 ing that the pleador is entitled to relief, and the Appeal Board 9 specifically approved that as the standard for the contentions 10 advanced in NRC proceedings, and we think that that add weights to 11 the whole import of what 687 should be read to mean in this context. 12 A short and plain statement to the entitlement to relief. 13

JUDGE KELLEY: We'll consider the material you've quoted. 14 It's been my view for a long time that we don't have notice 15 pleading in the NRC -- never have had, but I'll certainly look at 16 In other words, I don't know what specificity means for a 17 it. notice pleading but I'll certainly look at it. Why don't we go to 18 Mr. Pressler and Charlotte-Merklenburg -- my thought being it would 19 come up before lunch and it does not appear that very much divides 20 Mr. Pressler and the Staff and the Applicants. 21

We received from you a revised version of your contention 44, right?

24 MR. PRESSLER: (Nodding head affirmatively.)
25 JUDGE KELLEY: And Mr. McGarry, you filed a very short

1

4

5

6

REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

300 7TH STREET, S.W.

25

piece of paper I think on Mr. Pressler's revised #4?

2 MR. MCGARRY: Yes, sir, and we have no problems with Mr.
3 Pressler's revised #4. We do not object to revised #4.

JUDGE KELLEY: And the Staff --

MR. MCGARRY: If I may interrupt?

JUDGE KELLEY: Sure.

7 MR. MCGARRY: The point we made was, Revised #4 is con8 sistent with discussions that we have had over the past months with
9 CMEC, so we have no objections.

JUDGE KELLEY: And the Applicants have no objections to revised CMEC #4. Mr. Johnson, forgive me if you've told me on paper, but was -- what is the Staff's position on CMEC#4?

13 MR. JOHNSON: Our position is that there is a basis with 14 specificity stated in the revised contention, CMEC Contention #4, 15 but we'd like to limit that contention to the points #1 and #4, 16 the basis stated in #1 and #4, our view is that they stated a basis 17 for the sufficient specificity, however, the basis stated in Para-18 graphs #2 and #3 are based on a misunderstanding, a mis-reading or 19 what have you, of the DES, is that the Staff did not rely on the 20 so called linear hypothesis for mis-quesstimation and it doesn't 21 seem to meet with any disagreement, therefore, there really isn't 22 any contention. The Staff did rely on the linear hypothesis.

JUDGE KELLEY: Have you had an opportunity to discussit with Mr. Pressler?

MR. JOHNSON: I mentioned it -- yes, I did, we didn't

20024 (202) 554-2345

D.C.

BUILDING, WASHINGTON,

REPORTERS

300 7TH STREET, S.W.

1

2

really resolve it, but we did discuss it yesterday as we were going through the dust.

3 JUDGE KELLEY: Mr. Pressler, what's your prospective on 4 this?

5 MR. PRESSLER: Well, I'd like to address that just a 6 moment, but I think -- first of all I'd like to ask a general 7 question, and that is how the Board or how Mr. McGarry or how Mr. 8 Johnson take the discussion that's bee occupying us for the past 9 hour and a half -- how they take it as affecting this particular 10 contention?

JUDGE KELLEY: Okay, should we skip over to Mr. McGarry? MR. MCGARRY: We're not raising any objection to the contention, so a discussion -- we will stipulate that a discussion has no bearing on your contentions. As far as we're concerned, that contention is in and now we will of course take discovery and what not and at some appropriate point in time we may move for summary disposition, and we may end up litigating the issue.

JUDGE KELLEY: Let's get back one step -- I'm looking for my copy -- your first three contentions as I recall were admitted and we did say we wanted you to look at the Impact Statement when it came out in light of what it had to say, but there wasn't anything conditional about it, except to ask you to read it. There wasn't any specificity objections to #1 through #3 as I recall, is that correct?

25

MR, MC GARRY: That's correct from the Applicant.

JATD8	1	JUDGE KELLEY: Okay #1 through #3 were admitted prev-
300 TTH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345	2	iously and are in and are not in any suspended status at this
	3	point. It's only #4 of which there is any question. Do you well,
	4	I guess you're the second one, Mr. Johnson, to get the question,
	5	and can you respond to Mr. Pressler's question about the bearing
	6	of prior discussion today if any? On his contention.
	7	MR. JOHNSON: I don't believe that we raised a timeli-
	8	ness objection on #4.
	9	JUDGE KELLEY: You're just unhappy with the wording of
	10	some parts of it?
	11	MR. JOHNSON: Yes, sir.
	12	JUDGE KELLEY: All right, do you think it likely that
	13	you could come to agreement on this? Given a little bit more
	14	time.
	15	MR. PRESSLER: Well, I would think that we probably
	16	could. We've been able to agree pretty generally. Mr. Johnson
	17	thinks that I misread the DES and I think he has misread the con-
	18	tention, and I think that probably we could agree if we had an
	19	opportunity to talk about it.
	20	MR. JOHNSON: I have a suggestion. Why don't we try to
	21	confer at lunch or at some break, and then come back and report
	22	whether we do have agreement or not.
	23	JUDGE KELLEY: To come back by the end of the day I think
•	24	would be helpful, so if you could try to do that, then respond.
	25	Okay, now there's nothing else outstanding then as I know of,

JASD9

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

so far as Charlotte-Mecklenburg is concerned.

MR. PRESSLER: Right.

MR. JOHNSON: Right.

JUDGE KELLEY: Okay, so I'll hear from, if and when you reach some kind of worked out arrangement you will report to the Board later on. Let me just ask Mr. Johnson about the Staff process on the Impact Statement, you have the Draft out now, my question is are contentions, the kind filed, or the kind involved here -- the 23 I mentioned, from Palmetto and CESG, are those routinely reviewed as comments, whether or not to litigate, is that the case?

MR. JOHNSON: One second if I may.

(Brief pause) *

MR. JOHNSON: Your Honor, there's some lack of knowledge I think here as to whether it's routinely done. We will in fact in this case do it. I have seen things addressed as -- in the FES and other facility DESs -- FESs, that were common place -- I can only say for this particular purpose we do intend to treat them as comments.

JUDGE KELLEY: I think -- quoted in the FES itself? I've seen that done. I wondered whether in this case you would be doing that.

MR. JOHNSON: I believe they will be. I recall -- I
think it was Turkey Point's FES that the comments were raised and
then they were answered. To the extent that we are going to exhibit

JATD10

REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

300 7TH STREET, S.W.

them as comments, they will be answered. 1

JUDGE KELLEY: Just one other procedural question. 2 Assuming that there is a concention offered and the Board rules it 3 in, and then you make some change in your FES to accommodate the 4 problem at least as far as you're concerned, do you then come back 5 in and make a motion to strike, or ask the Intervenor to withdraw 6 7 or how does that work?

MR. MCGARRY: I'd say, speaking for the Applicant, 8 that we would file a motion for summary disposition. Unless we 9 can handle it more expeditiously. Excuse me for incerrupting. 10 11

JUDGE KELLEY: That's all right.

MR. JOHNSON: I don't want to delay anything anymore. 12 13 Let me get back to you on this.

JUDGE KELLEY: Okay. We thought it might be simple 14 locking at the clock and our schedule to get down to something we 15 could handle in a short time, go to lunch, rather than start in 16 on these contentions right now. We did want to talk a little bit 17 about scheduling and when things are expected and so forth, and 18 I wondered if we might just raise some questions then with the 19 appropriate people about the progress of various things and when 20 we might expect them, and we would like to consider that in terms 21 of what we are planning for, timing and the like. Mr. McGarry, 22 I guess in the Applicant's case, can you give us -- if not now 23 later -- some report on where the emergency plans stand? 24 MR. MCGARRY: The Emergency Plans will be filed with FEMA 25

4

5

6

11

13

16

22

25

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

in March, 1983.

2 JUDGE KELLEY: March, '83. And this will include, have you got two plans, or six or eight or what? 3

MR. MCGARRY: It will -- it will have all of the appropriate plans, the State Plan of South Carolina, it will have the appropriate County Plans, and North Carolina as --

7 JUDGE KELLEY: It's essentially State Plans and what --Mecklenburg and York Counties -- is that right? 8

9 MR. MCGARRY: It's the relevant counties. Whatever the 10 relevant counties are.

JUDGE KELLEY: When you say relevant you mean within 12 10 miles of the plant?

MR. MCGARRY: Yes.

14 JUDGE KELLEY: Well, what about -- is there a separate 15 plan for Rock Hill?

MR. MCGARRY: That I don't know.

17 JUDGE KELLEY: I'm just -- maybe you could let us know. 18 MR. MCGARRY: We will.

19 JUDGE KELLEY: But it's your expectations that these plans 20 will be completed and available to the Board and parties by March 21 of '83.

MR. MCGARRY: March of '83.

23 JUDGE KELLEY: When is your final Impact Statement due, 24 Mr. Johnson -- about?

MR. JOHNSON: The final Impact Environmental Statement

ATD12

1

4

5

20024 (202) 554-2345

REPORTERS BUILDING, WASHINGTON, D.C.

300 7TH STREET, S.W.

is due January '83.

2 JUDGE KELLEY: Any reason to think that won't be on 3 track?

MR. JOHNSON: We believe it will be.

JUDGE KELLEY: What about the SER?

6 MR. JOHNSON: The SER is on track and we believe it will7 be published in February, 1983.

8 MR. RILEY: Is the SER a draft, a final form or is 9 final form only?

MR. JOHNSON: I believe it's in final form with the possibility thereafter of having supplements for updated matters but it's not in draft form.

JUDGE KELLEY: With those dates in mind, and making some assumptions about time for discovery it's kind of hard to make now except as guesses, Mr. McGarry, what are your thoughts about going to hearing?

MR. MCGARRY: We believe that discovery should begin 17 October 8th, 1982. It should end March 8, 1983. Summary disposi-18 tion should be filed on May 8, 1983. Responses to summary dispos-19 itions should be filed June 8, 1983. Board ruling on the summary 20 disposition August 8, 1983. Pre-trial testimony filed September 21 8, 1983, and the hearing to commence on October 1 and run no longer 22 than December 31, 1983, proposed findings to be filed no later 23 than January 31, 1984, and initial decision will be issued April 24 31, 1984, so as to put us in the position to receive a license so 25



that we can load fuel on October of 1984, and our schedule today 1 is consistent with obtaining -- requiring permission to load the 2 fuel in October of 1984. 3

Now with respect to the schedule, there is quite a bit 4 of I'll say --5

JUDGE KELLEY: Stopping you just a minute. Do you have that on a piece of paper or is that -- it's in the record now I 7 know, and I guess maybe that's enough. You don't have a handout 8 9 do you?

10

11

6

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

MR. MCGARRY: No, sir.

JUDGE KELLEY: Okay. That's fine.

MR. MCGARRY: With respect to the schedule, we based 12 this schedule on what are the contentions today. We can speculate 13 as to future contentions that may be filed provided they can meet 14 the appropriate standards. Now we have have put blinders up. We 15 recognize that there are a lot of discussions about emergency. 16 There is a lot of -- I would characterize it -- as fat in the 17 schedule. We are allowing from this point on six further months 18 of discovery. We're also allowing two months for the preparation 19 of summary disposition. That's usually a vehicle that the Appli-20 cants or the Staff would use. I don't think -- an additional 21 22 period of time.

We're allowing two months for the Board's decision on 23 summary disposition and we'll be doing nothing, and it's likewise 24 in the month to respond to some of these. There's about six months 25

JATD14

REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

300 7TH STREET, S.W.

25

of fat in the schedule and I maintain that six months can accommo date contentions that are subsequently filed in the early part of
 1983.

JUDGE KELLEY: There is another aspect of this and I'm 4 sure you are aware of, but I don't believe you mentioned, emergency 5 planning -- if the documents come in last on emergency planning, 6 and as a matter of fact they will, and if some of them trail off 7 for one reason or another, it is possible to apply for them if you 8 meet the requirements to get a low power license without having gune 9 10 through all of that. You have to before you go full power, but not 11 low power, so that's a consideration I suppose.

MR. MCGARRY: Having gone through the McGuire Hydrog n 12 Exercise, we're well aware and appreciate that there could be 13 juggling at the end but right now we would like to perceive as one 14 hearing and one license. We all recognize that things do happen 15 but I suggest that emergency plan contentions be filed after the 16 submittal of the plans, which the schedule I understand is a firm 17 schedule, and that we will meet that one schedule, that we can still 18 litigate in a hearing the emergency plan contention toward the end 19 of the three month period that I referenced. 20

21 JUDGE KELLEY: What is your hearing date beginning 22 projected again?

23 MR. MCGARRY: The 1st of October, 1983 and run through
24 the 31st December.

JUDGE KELLEY: Okay. Well, that's a nice layout of a lot

20024 (202) 554-2345

D.C.

BUILDING, WASHINGTON,

REPORTERS

300 7TH STREET, S.W.

1

2

3

6

of different points and that's helpful to give us your thinking. Does the Staff -- has the Staff thought that far ahead on all of these matters?

MR. JOHNSON: The Staff has not arrived at a detailed 4 schedule such as Mr. McGarry has offered, however, we do have a 5 projection of a hearing date of 9/83 -- September, '83. The availability of various documentation I think obviously are bench-7 marks that diclate certain scheduling of matters, and also it's 8 very difficult to project what contentions are going to be at this 9 time. in terms of sequencing perhaps summary disposition and dis-10 covery until we know what the contentions are. 11

JUDGE KELLEY: I gather -- you just heard Mr. McGarry's 12 schedule and I rarely ask the people to comment, you know, cold, 13 I understand your premises -- useful to have something in front 14 of us -- you wouldn't have any further comment to offer other than 15 what you've given me, right? 16

MR. JOHNSON: I'm afraid I didn't take down all of the 17 dates that Mr. McGarry, if you're asking me to comment on his 18 19 schedule ----

JUDGE KELLEY: I don't think it's necessary. If you had 20 a comment, fine, but we don't need detailed comment at this point 21 I don't believe. 22

MR. JOHNSON: As a general matter, I would agree with 23 him that there is some time in this period during which to have 24 adequate discovery and opportunity for summary disposition, and 25

JATDI6

1

4

5

8

(202) 554-2345

20024

D.C.

REPORTERS BUILDING, WASHINGTON,

300 7TH STREET, S.W.

21

still get to hearing by September, '83.

2 JUDGE KELLEY: Your projected fuel load date, Mr. McGarry 3 was October --

MR. MCGARRY: October, '84.

JUDGE KELLEY: Mr. Riley?

6 MR. RILEY: Is there a date available for the filing of7 the control room review?

JUDGE KELLEY: I don't know that there is.

MR. MCGARRY: Yes, the control room review information
will be filed in the January-February time frame. To be clear we
will file our plan January-February, 1983, and it will indicate
the methodology that we will use, that we will go through. Thereafter
to be clear, we will perform an analysis, but the methodology and
clear road map of the control room review will be provided in
January, 1983.

16 JUDGE KELLEY: Mr. Riley, any other comment or question 17 or statement about the scheduling matters?

MR. RILEY: Well, I'm sure this can be done informally
except Mr. McGarry speaks faster than I write, and I'd like to get
some more dates.

JUDGE KELLEY: Mr. Guild?

MR. GUILD: The point of initial observation, Judge Kelley, is that Mr. McGarry's premise seems to be on the contentions that are in today, and he's opposed every contention that we've filed, so I'm really not sure what issues he conceives this sched-

D.C. 20024 (202) 554-2345

BUILDING, WASHINGTON,

300 7TH STREET, S.W., REPORTERS

1

2

3

ule is intended to address, but I assume that they are few in number. That should bear on the adequacy of this schedule it seems.

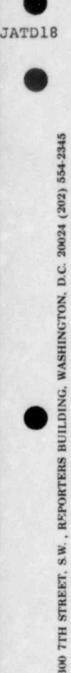
JUDGE KELLEY: Numbers of contentions as of right now this morning is kind of speculative exercise and we'll know more when we can rule on what's before us. Okay, well that's helpful information I think. Are there other points along that line that you want to raise? Maybe this is as good a time as any to take a lunch break. Anything else that anybody who perhaps has to leave and can't come back this afternoon wants to raise?

MR. MCGARRY: Judge Kelley, just so I'm clear, in going 11 through your order you raised several matters. First was impac' 12 of 687, the second item was discovery. We're prepared to address 13 it but we're also prepared to rest on the papers and I'd just bring 14 that to your attention. The next item is DES contentions and I 15 understand we'll go through those this afternoon if that would be 16 helpful. The schedule for construction, I think we've indicated 17 that to you. Completion of required documents, we've discussed 18 that. Credible accident pleadings. 19

20

JUDGE KELLEY: We've got that.

21 MR. MCGARRY: You've got that. We'd stand on that 22 unless you want anything further. The other relevant matters we 23 had to bring up was schedules, so as far as we see it, this after-24 noon should be DES contentions unless you want to hear from us on 25 discovery, or parties on discovery or any other matter, but I just-



JUDGE KELLEY: That's a good point about what we'll try to do the rest of the day and tomorrow the same thing. I think we see as our next priority the discussion of the new contentions and I expect that will take us a while to do. We might have some dis-cussion about d' covery say later in the afternoon if we get to that, and then we'll just have to make a judgement at the end of the day whether it will be useful, and try to reconvene tomorrow morning and it sort of depends on how far we get and what we think we can resolve and what we think -- what we think we'll have to take home with us, so I think that's about all we can state for now.

Okay, it's about -- what that clock says it is, 7 minutes after 12. Shall we say -- 1:15.

(Whereupon a luncheon recess was taken at 12:07 p.m.)

AFTERNOON SESSION

1:20 p.m.

JUDGE KEILEY: Back on the record.

We will be turning very shortly to these individual new contentions. As we left, it was a discussion about -discussion between Mr. Johnson and Mr. Pressler, did you get a chance to talk over--

MR. PRESSLER: Yes.

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

el

300 7 I'H STRZET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

JUDGE KELLEY: What was the upshot of that?

MR. PRESSLER: The two paragraphs of CMEC's revised contention where--that is the staff had disficulty with them and what we decided to do roughly was to split the difference. I agreed to drop the second paragraph and Mr. Johnson agreed to let the third paragraph stand. The staff still feels that my third paragraph is in error and we are going to pursue that in the discovery process. I still think that there is a certair amount of merit in the second paragraph and I plan to submit it as a comment on the DES to the staff simply as a comment.

JUDGE KELLEY: Are we in--well, go ahead.

MR. JOHNSON: May I just add that I agree with virtually everything that was stated. I would just add that we also stipulated that to the extent that paragraph 3 relies on certain statements that indicate that the staff is relying upon BEIR III that upon analysis and review of certain documents or perhaps as a result of discovery it turns out that we were relying on BEIR

I, which is my contention that he stipulated that he would withdraw that element of it.

MR. PRESSLER: Yes.

JUDGE KELLEY: Can you then state where, in your opinion, that puts us analytically? Now we still have to rule, that's true, but in terms of your position, where do you think we are?

MR. JOHNSON: That the contention, we are ready to accept this contention as admissible, delete--have deleted the second paragraph and the third paragraph is in but subject to further stipulation of the parties.

JUDGE KELLEY: Well, anything is always subject to further stipulation I suppose. Now it is in the record now that we are thinking about that, but insofar as the document is concerned, that paragraph from your standpoint will be it, right?

> MR. JOHNSON: Yes, we are ready to look at that. (Brief pause.)

JUDGE KELLEY: Okay. Mr. Pressler, is there any further business that you are aware of that we need to do with you in your representation? I am happy to have you here if you want to stay but I thought I would cover this and then if you didn't want to, you don't have to.

MR. PRESSLER: I don't think there is any further business but, on the other hand, I do want to stay.

JUDGE KELLEY: Fine. Okay. We are at the end at least in that we have covered Charlotte-Mecklenburg's points and we

ALDERSON REPORTING COMPANY, INC.

200 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

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

RA e3

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

15

16

17

18

19

20

will turn now to the discussion of the document captioned Palmetto 1 Alliance and Carolina's Environmental Study Group Supplement to 2 Petitions to Intervene regarding Draft Environmental Statement 3 dated September 22, 1982, and I think we would like to follow 4 the format somewhat similar to the format we took at our first 5 pre-hearing. We don't, I don't think any of us want to take every-6 body else's time to restate everything we have said in our papers 7 but rather to focus on what are the salient points of disagreement. 8 This is a situation which is typical in that we have contentions 9 filed by the Intervenors and we have responses in writing from 10 the other two parties. We don't have anything in writing at this 11 point from Intervenors as to what they might want to say in response 12 to what's been said in the opposition papers, so lets give them 13 an opportunity to speak to the opposition papers. 14

Is there any--I think the Board's chief interest here and certainly a principal interest will be to isolate those elements or element in each of the contentions that are new information or new analysis in some sense that are felt by the Intervenors to justify filing at this point rather than earlier without being subject to an untimeliness finding of some kind.

And sticking to the notion that we don't want to simply repeat what we have already said, a little bit of context can help so let me suggest that whoever is appropriate, whether it is Mr. Riley or Mr. Guild on a particular contention, I suppose one or the other of you would be the lead on these various points.



300 7TH STREET, S.W., RF ORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

6

7

8

9

10

11

12

13

14

15

18

19

Could you just very briefly capsule the thrust of contention one,
 as a starting point, and then we will move on.

3 MR. GUILD: Just to make a suggestion as to how to group
4 them, I have just, over the lunch break, looked again at the staff's
5 statement and they make an effort to group by subject matter.

Since we are going to be flipping back and forth and that may be a little bit cumbersome, I was just going to suggest that we follow their format, without saying that we agree to the comments, they tend to group them by subject matter and that might make it a little guicker.

JUDGE KELLEY: What do you think, Mr. McGarry?

MR. McGARRY: Whatever is the most expeditious. I just thought going one at the time and moving right along, but if it is more expeditious the other way, so be it.

JUDGE KELLEY: Does the staff have a thought?

16 MR. JOHNSON: Whatever is agreeable to everyone else 17 is fine with us.

JUDGE FOSTER: One at the time.

JUDGE

JUDGE CALLIHAN: I agree.

JUDGE KELLEY: Appreciate the suggestion. I think we would prefer to just take them one at the time. So, on number one, whoever wants to restate that briefly, I think that would be helpful.

24 MR. RILEY: The initial sentence in what I am now calling
25 ES-1 because of the series of new Arabic numerals should be

e5

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

1

2

3

4

5

6

7

8

9

separated from our original contention numbers, and the prefix ES will do it; the initial sentence states that, "The probability of severe accidents, radiation exposure and damage are understated", in the Environmental Statement, making specific reference to figures 5.3, 5.4, 5.5, 5.6 and 5.7. If you will take a brief glance at those figures, you will see that they are all cast in the form of a probability number on the ordinate scale, it is on page 5-59.

000447

JUDCE KELLEY: Okay.

These are -- five figures are all cast, MR. RILEY: 10 the probability in the ordinates scale and the response in the 11 abscissa scale and observation number one is that these probabilitie: 12 have to be distinguished from what we normally refer to as proba-13 bilities. Actuarial experience is usually the basis of probability 14 so like when we talk of an automobile accident, this failure or 15 that failure, sliding in the bathtub. These are based on certain 16 assumptions made, certain models built and so forth. It is our 17 contention that these models of probabilities resulting therefrom 18 are unrealistic and we note that though the DES recognizes on 19 page 5.6, there was one serious accident, namely TMI, for 400 20 reactor years of operation; we think that there are two other 21 very serious accidents. There was Fermi --22

JUDGE KELLEY: Let me interrupt you. I have a little trouble reading this. I wasn't sure whether there were two or three contentions here or really one.



300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Now the point about the tables, they are critical on the tables, then you talk about Fermi and Browns Ferry against-in addition to TMI; is there some relationship between the three accidents and these tables?

MR. RILEY: Yes, there is. Fermi, Browns Ferry and TMI are all real worlds in the context of actuarial, not speculative or calculation, and in the real world, there were, as I view it, three very serious accidents in 400 reactor years. This will give an accident incidence of one, more or less, in 130 to 140 years, as opposed to one serious accident in the Reactor Safety Study of one per 20,000 reactor years which if you spread the uncertainty limits far enough, you could say it includes one in 400. Now we are saying that we regard these figures and the probabilities that they associate with given types of accidents to the general area of high-class fiction. That they are unrealistic in the sense that they are speculative when there is sufficient evidence to indicate material doubt about them to not rely on them.

MR. GUILD: Judge Kelley, if I could add, I understand the point of the staff's reference to TMI, which is at 5-46 of the DES, is to confirm the validity of the probability numbers derived in the Reactor Safety Study and that's the point of the assertion that there were, in fact, two additional accidents that should be considered in that checking process, and that when checked by that actuarial set of facts, the probabilities used by the

1 staff are demonstrably in error.

e7

300 7TH STREET, S.W., FEPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

2 MR. RILEY: I further can't agree with some of the state-3 ments in the staff's response. Our understanding is that the 4 monitors at Browns Ferry were inoperative at the time of the accident 5 Now, of course, there is no recording from inoperative monitors. 6 JUDGE ALLIHAN: What monitors, Mr. Riley, please? 7 MR. RILEY: Atmospheric Release Monitors. 8 JUDGE CALLIHAN: Thank you. Stack? 9 MR. RILEY: No stacked, but placed at a distance, 10 probably--11 JUDGE ALLIHAN: Radiation monitors? 12 MR. RILEY: Yes, sir. 13 JUDGE CALLIHAN: Thank you. 14 We also feel that the argument Fermi should MR. RILEY: 15 be excluded from consideration because it was a liquid metal fast 16 breeder reactor overlooks the fact that it is in the population 17 of reactors for which an estimate of accident probability had 18 been made. I have reviewed the original Fermi documents, of the 19 NEC, the predecessor staff of the present NRC staff. I think 20 this is a fair sampling of population regardless of the type of 21 reactor. 22 I also point out that the fact that these were not as 23 major as TMI was due to several inadvertencies of a very slender 24 sort. I submit that if Fermi had been allowed to go only a few 25 more minutes without scramming, the melt down would have been

RA e8

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

a very significant one and the reactor would have been breached.
There was a period of 30 days in which there was enough additional
internal heat generation in the reactor at Fermi to make it very
iffy as to whether or not it was going to hold. I am saying that
when you get that close a brush, you should realize that you had
a serious accident.

At Browns Ferry, I was almost amused at the discussion 7 on that accident in terms of provisions being made for handling 8 fires. The point is that the fire at Browns Ferry went way beyond 9 any of the extents which the Commission had proposed in dealing 10 with them. The Commission specified that carbon dioxide be used 11 and the people at the plant were pretty religious about using 12 They fought the fire for six hours and finally carbon dioxide. 13 gave up on it. A County Fire Chief who tried to get into the 14 act several hours before was finally let in at this desperation 15 moment and he believed in water and in 15 minutes, he had the 16 fire out. What I am pointing out is that the system of regulations 17 that was then in effect permitted the fire to occur that was far 18 beyond the bounds anticipated. The regulations would assume that 19 the fire was extinguished. The fact was the fire was not. 20 Again, I feel that it was very close. If that Fire Chief had 21 not come along, if we hadn't had a brilliantly improvis tional 22 operator who used the control rod system hydraulic pumps to keep 23 the water level up, we would have had a melt down the e, so I 24 regard these as serious accidents, and the actuarial information 25

	1	is one accident in about 130 or 140 years.			
e9	2	JUDGE ALLIHAN: Referring, Mr. Riley, to your			
	3	ES number 1. Is that a topic which was covered in the December,			
)	4 1981 filing or is this a new contention that has not yet ap				
45	5	until this moment?			
554-23	5	MR. RILEY: It was covered in the December filing.			
(202)	7	JUDGE CALLIHAN: Can you give us a reference, please?			
20024 (202) 554-2345	8	MR. RILEY: I certaily shall. It was contention number			
D.C.	9	2			
	10	JUDGE CALLIHAN: Now there were several groups of			
IHSHIP	11	contentions as I remember.			
S.W., REPORTERS BUILDING, WASHINGTON,	12	MR. RILEY: Yes, sir.			
	13	JUDGE CALLIHAN: There was Palmetto or yours, number			
	14	2, whose number 2?			
	15	MR. RILEY: It is Palmetto number 2.			
.W. , R	16	JUDGE CALLIHAN: Thank you.			
	17	MR. GUILD: Judge Kelley, the significant distinction			
H STR	18	between Palmetto number 2 as originally filed and this new ES-1			
300 7TH STREET,	19	is of course the Environmental Statement and the Staff's Environ-			
	20	mental Analysis had not yet been done at that time so there was			
	21	not a specific critique of probabilities available to us at the			
	22	time of this summer '81 filing.			
	23	JUDGE CALLIHAN: Can you give us a reference to that,			
•	24	please, Mr. Guild?			
	25	MR. GUILD: Well, sir, the number 2, Palmetto Alliance			

	1	number 2 originally was a severe accident contention. But its				
e10	2	focus was not on the DES because the DES did not then exist.				
	3	JUDGE CALLIENN: I am asking for a reference in the				
	4	DES to your recent assertion.				
45	5	MR. GUILD: There is none. There was no DES at the				
W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345	6	time. If I am not following you, tell me.				
	7	JUDGE CALLIHAN: I understood you to say that ES number				
	8	1.				
, D.C.	9	MR. GUILD: Yes, sir.				
GTON	10	JUDGE CALLIHAN: Bears some relation to Palmetto number				
ASHIN	11	2 in their early days.				
NG, W	12	MR. GUILD: Yes, sir.				
	13	JUDGE CALLIHAN: Has been derived on the basis of the				
LERS B	14	DES.				
EPORT	15	MR. GUILD: Yes, sir.				
.W., R	16	JUDGE CALLIHAN: And I am asking for a reference in				
EET, S.	17	the DES which you used to evolve from PA number 2 to ES number				
300 7TH STREET,	18	1.				
TT 008	19	MR. RILEY: That is on page 5-46 of the DES.				
67	20	JUDGE CALLIHAN: Thank you.				
	21	MR. RILEY: And the corresponding figures I have already				
)	22	given, sir.				
	23	JUDGE CALLIHAN: Yes. Now, referring to 5-46, can you				
)	24	be a little explicit and say what is on page 5-46 that has made				
	25	ES number 1 different from PA number 2?				

R

MR. RILEY: The thing is the specific probabilities 1 that are provided in those four figures. We have no probabilities e 112 to hang our hat on prior to DES. 3

4

5

6

7

10

11

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

JUDGE CALLIHAN: I will make a statement and ask for your comment on it. Browns Feiry, Fermi, even Three Mile Island were pretty well in the public domain, information pretty well in the public domain prior to December, 1981, so I guess I am asking again what explicitly as new information has derived on 8 or about September 7, 1982 when I received the Environmental State-9 ment which has led to this recasting of PA number 2 into ES number 1?

MR. GUILD: Judge, to start from this position, we filed 12 a series of severe accident contentions including Palmetto Alliance 13 number 2 in the initial filing. The Board's response to them 14 was in short, to paraphrase, these contentions are premature. 15 Under the interim statement of policy, the Commission staff must 16 address severe accidents in their environmental analysis and we 17 expect them to address the criticisms made by Palmetto and CESG 18 in their contentions or to explain why they are not. Well, the 19 staff published the DES which contained some 30-odd pages of analyses 20 of severe accident impacts, including a number of points that 21 we will characterize as responsive to our criticism. We then 22 analyzed the DES severe accident analysis and I believe when taken 23 together, if you go through the severe accident contentions you 24 have in front of you, the September filing, we go point by point 25

with each of these pieces of analysis that the staf makes, so that is the thrust of the development of this subject matter, sir, and, of course, what transformed the original Palmetto Alliance number 2 into what you now have as ES number 1 included the staff responding to our criticisms and then us digesting those responses and formulating the contenuions on the subject of severe accidents that you now have in front of you.

000454

JUDGE CALLIHAN: As you state your -- "your critism" is that PA number 2?

MR. GUILD: PA number 2 and, if I can, just for clarity--JUDGE CALLIHAN: Well, it was in this filing, without bothering about--

MR. GUILD: Yes, that is correct.

1

3

4

5

6

7

8

9

13

25

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

e12 2

JUDGE KELLEY: A question on your last point, Mr. Guild, 14 Now, in the context of earlier contentions filed prior to the 15 Impact Statement, as to most topics one would expect that they 16 would be covered one way or another in the ER and therefore, one 17 would expect that a party opposing the contention would point 18 to the ER and say, look, we have already talked about that. Is 19 this particular topic a little different in the sense of serious 20 accident analysis in an Impact Statement? There isn't anything like 21 that in the ER, I believe. Isn't that right? I mean you don't 22 have any obligation to discuss serious accident beyond design 23 basis. 24

MR. GUILD: That's correct.

	1	JUDGE KELLEY: The staff does by virtue of the so-called				
e13	2	policy statement. Has the staff, Mr. Johnson, ever in the past				
	3	in any other document talked about severe beyond design basis				
•	4	accidents at the Catawba facility?				
2345	5	MR. JOHNSON: Not to my knowledge.				
S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345	6	MR. RILEY: I can answer that question.				
24 (202	7	JUDGE KELLEY: I didn't ask you.				
C. 2002	8	MR. RILEY: I know, voluntary.				
N, D.0	9	(Brief pause.)				
INGTO	10	MR. JOHNSON: To my knowledge, this is the first time.				
WASH	11	JUDGE KELLEY: Okay, and in the analysis it is site				
DING,	12	specific, is it not, in the sense that it is not just some riff				
BUIL	13	number from some other generic study but rather it is a look at				
RTERS	14	Catawba and some calculations and some number comes out, isn't				
REPO	15	that right?				
	16	MR. JOHNSON: Yes, sir. I think the DES does discuss				
REET.	17	the extent to which generic analyses are relied upon.				
300 7TH STREET,	18	JUDGE KELLEY: Right. But there isit is a site specific				
300 7	19	analysis?				
	20	MR. JOHNSON: Yes.				
	21	JUDGE CALLIHAN: You just said, Mr. Johnson, that these				
D	22	curvesfigures, five point something over here, would not apply				
	22	to some other pressurized water reactor of this design?				
	24	MR. JOHNSON: No, that is not what I intended to say.				
	25	I just had trouble finding the reference. There is a statement				
		ALDERSON REPORTING COMPANY, INC.				

I believe, the first page of Appendix E explains the way in which
the generic studies, the reactor safety study, the base lining
of that study, of those analyses were applied to Catawba, but
it states, for example, "Therefore, the use of the Surry rebaselined
sequences is appropriate since a Catawba plant-specific assessment
of accident sequence is not available."

000456

7 JUDGE CALLIHAN: I guess it is obvious what I am trying 8 to establish is some site specificity of this analysis and in 9 what way is it site specific?

MR. JABBOUR: I can answer. It is site specific in the sense that Catawba's--this analysis was done for Catawba, not for any other plant so that--

JUDGE CALLIHAN: What characteristics of Catawba make this a unique analysis as contrasted to Mr. Somebody Else's pressurized water reactor on another river?

16 JUDGE KELLEY: And what about numbers of affected persons, 17 isn't that site specific?

MR. JABBOUR: You mean the population around Catawba--JUDGE KELLEY: Yes.

20 MR. JABBOUR: Would be wholly different factors. Other 21 things could be slightly different from another accident but not 22 major differences involved in it.

MR. GUILD: I believe meteorology is also supposed to
 be site specific. Topography is also supposed to be site specific.
 MR. RILEY: Property values are sit specific, 5.7.

ALDERSON REPORTING COMPANY, INC.

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

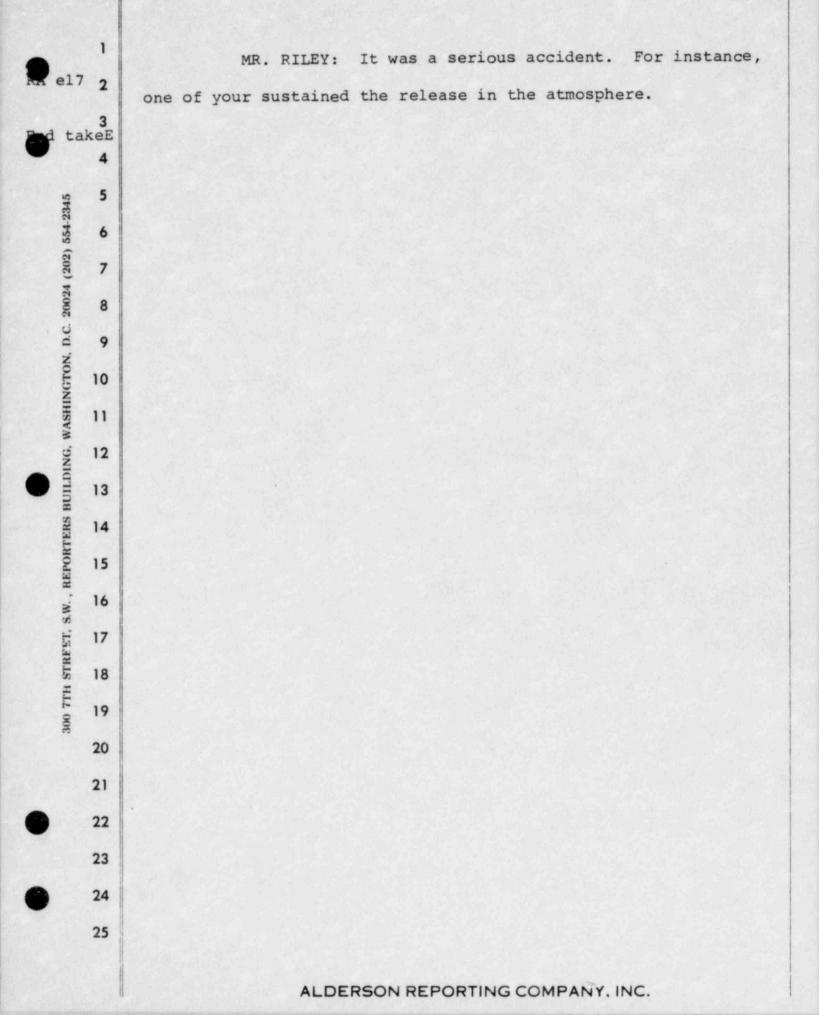
18

19

JUDGE KELLEY: I think all we are really after is, is this 1 new information or is this something we have all known for a long e15 2 time and a lot of it is, well, a lot of material for it is old 3 stuff I guess, everybody knows Browns Ferry happened a long time 4 ago, but the analysis specific to Catawba, these curves here, 5 300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345 the five figures that are cited, those are site specific curves, 6 are they not? 7 MR. RILEY: Yeah. 8 JUDGE KELLEY: And if you look at similar curves for 9 five other reactors, they are not going to look very much different 10 but they are somewhat different, and then you say in your contention 11 that those figures are inaccurate. 12 MR. RILEY: That is correct. 13 JUDGE KELLEY: Are you saying that because there isn't 14 any discussion of Browns Ferry and Fermi, is that why they are 15 inaccurate? 16 MR. RILEY: No, I am saying the fundamental predicate 17 there has been at most one serious reactor accident in 400 years, 18 on the face of it, in error. That's a basic fault. 19 JUDGE KELLEY: What, in the tables? 20 MR. RILEY: In their methodology. 21 JUDGE KELLEY: On the table--are you saying the tables 22 are wrong because they left those accidents out? I am just trying 23 to understand the contention. 24 MR. RILEY: Yes, I am saying that the figures are 25

wrong because they are not based on experience, but they're based 1 e16 on side roles and from hearsay, a set of assumptions. 2 JUDGE CALLIHAN: What characteristics of the Browns 3 Ferry occurrence causes you to classify it as a serious accident? 4 The fact that it was within 30 inches of MR. RILEY: 5 300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345 exposing the core. It is normally ---6 JUDGE CALLIHAN: 30 inches of --7 MR. RILEY: Water. 30 inches of water over the core, 8 it come down to about 12 to 13 feet. 9 JUDGE CALLIHAN: I am trying to understand your statement. 10 Oh, in a boiling water reactor, sir, the MR. RILEY: 11 core is normally covered by 12 to 13 feet of water. 12 JUDGE CALLIHAN: True. 13 MR. RILEY: During the boiling off that took place 14 over a period of five or six hours, that level got down to 30 15 inches. 16 JUDGE CALLIHAN: I understand. 17 MR. RILEY: Now if a brilliant reactor operator had 18 not started out a pump that fell outside the safety system, namely 19 the hydraulic supply for the control rod system, that reactor 20 would have melted down. 21 JUDGE CALLIHAN: Would you agree with me if I said --22 I am sorry, let me rephrase that. 23 Can I characterize your statement as saying it was 24 potentially a serious accident? 25

000458



FILW

1 MR. RILEY: It was a serious accident. The reactor was 2 unavailable for electrical generation for several years. There was 3 over a hundred million dollars of damage done in the accident. It 4 was more than substantially serious, it was serious. And there was 5 no measurement of the actual release. If there were any leaking 6 fuel rods, there had to be release because massive quantities of 7 steam were released in the atmosphere.

8 JUDGE KELLEY: I'm still unclear, Mr. Riley, on the 9 statement of the contention and if you will, the logic, the 10 rationale of the contention. You said I think a few minutes ago, 11 and I'm paraphrasing but I think you said that you didn't agree 12 with the approach and methodology and that they were speculative 13 and not based on fact. Now that may all be true, but this 14 contention doesn't say that. This contention to me says those 15 figures are understated, period. Then it goes on to say they've 16 only recognized one accident and there have actually been three. 17 Now this doesn't say there's anything wrong with their methodology 18 or their assumptions or their approach that I can see, it sounds 19 to me like you're attacking their data base. And I gather from 20 our discussion that that's not it.

21 MR. RILEY: Well I think, sir, that maybe I can help 22 clarify the communication problem. I thought it was apparent in 23 the language that I was using that they were calculating probabilities 24 rather than relying on actual experience. And I'm saying when you

10

F2DU

take a look at the actual experience from the incidence is one in 133, it's orders of magnitude different from the probabilities they come up with in these tables. And I thought on the face of it, the contrast was apparent. I didn't make the bridge which you point out was lacking, I'm sorry, I took it for granted.

JUDGE KELLEY: Well, I'm a layman reading it but I'm
just trying to understand it.

8 Okay, well, I think this has been useful, I'm not sure
9 what the format is but we'll just forge ahead.

Mr. McGarry, --

MR. MCGARRY: Yes. I have more than several comments,
12 let me just jump into them.

13 The staff in the subject section of the DES is considering 14 severe accidents. It defines those severe accidents on page 5-36, 15 as class high accidents that can be distinguished from design-basis 16 accidents in two primary respects. They involve substantial 17 physical deterioration of the fuel in the reactor core, including 18 over-heating to the point of melting.

19 They're talking about core melt situations. They're
20 not talking about Brown's Ferry, they're not talking about Fermi.
21 So one point we'd like to make is whether or not they included
22 those two incidents in their data base is irrelevant to the very
23 subject that the DES is addressing.

24 Second of all, the DES does make reference to Fermi and 25 does make reference to Brown's Ferry, contrary to the intervenors'

allegation. So there is -- first of all, the contention is irrelevant; second of all, there's no basis for the contention.

1

2

3

4

5

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

000462

Now I have a question down on my pad, why are the models unrealistic, because that is a term that was used. And I don't think -- I've not heard a clearcut answer, and if there is going to be a contention, that's the answer that's necessary to support 6 7 that contention. With respect to the Reactor Safety Study, in this contention and in other contentions there is reference made 8 9 to the impropriety of using the Reactor Safety Study. We are 10 never told why. There is no specificity, there is no basis.

With respect to newness of the contention which I believe 11 12 the Board was inquiring to, with respect to the Reactor Safety Study, it was clear in the interim policy statement on Class 9 13 accidents that would recognize the Reactor Safety Study was a 14 proper tool to use. So we maintain the intervenors should have 15 16 been on notice. And just to be clear, there is no question that 17 the intervenors were aware of the Reactor Safety Study. I just 18 make reference to a motion filed in the Catawba CP case by CESG 19 back in 1979, that culminated in the Reactor -- the Director's 20 decision in January of '81, that attacked the use of the Reactor 21 Safety Study.

22 And as a basic point as we go through applicant's position we're going to rely and standby our pleadings as this Board has 23 asked us to. I'm just trying to address points as they come up. 24 25 JUDGE KELLEY: What about the information in Figures



300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

1 5.3, 4, 5, 6, 7; the site-specific probability curves? Isn't that
2 new information?

MR. MCGARRY: These curves may indeed be new information 3 in the sense that it wasn't contained in our Environmental, but 4 then I'd ask -- I think the fundamental question after you get 5 over the newness is the contention new, which I think is the point 6 you're making there. Then let's address the contention itself. 7 What's wrong with these curves? And I say to you, what's wrong 8 with the curves, if it's because they fail to consider two accidents, 9 I maintain first it's not necessary for them to consider those 10 two accidents because of the very nature of the subject matter. 11 And second of all, the DES itself does address these two accidents 12 and explains how it treats those two accidents. 13

JUDGE KELLEY: Is there actually a prose discussion of both Browns Ferry and Fermi?

16 MR. MCGARRY: In our pleadings we make reference to Fermi 17 and --

18 JUDGE KELLEY: I saw Fermi, is Brown's Ferry in there
19 too?

MR. MCGARRY: As we state in our pleading, the Brown's
accident, which is well known to the intervenors and has been
referenced in other contentions, other cases by them, is referenced
in the DES as a source authority. The case is strong on Fermi in
terms of clearcut discussion of Fermi in the DES. With respect
to Brown's Ferry, you have to go to the records. Again, that goes

1 co newness, if you will.

F5p

2

3

4

5

6

7

8

9

10

11

12

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

JUDGE KELLEY: The fact that the staff makes a reference to something in an Impact Statement doesn't -- it doesn't necessarily follow that everything that's being referenced is therefore old information.

MR. MCGARRY: I would agree with the Board that you have to be reasonable in that, in where you draw the line, and we're not here to really pound our fists on the table on that point. We just draw it to your attention that it was referenced and we also draw to your attention I think the point that Dr. Callihan made that Brown's Ferry is not something new and --

JUDGE KELLEY: No, it's not.

13 Let me ask Mr. Johnson. We have your filing, do you
14 want to comment on what you said? A number of things have been
15 said.

16 MR. JOHNSON: The only thing I'd like to address is 17 my new understanding of what the contention intended. I think we 18 stand by everything that's stated in our response. From what I 19 gather, Mr. Riley is saying that he's relying on the real world, 20 these three real world events to undercut the reliability or the 21 reliance of the staff on the Reactor Safety Study and the 22 corrective rebaselining and the other site-specific analyses that 23 were done. It seems to me based on what the definition of severe 24 accident is, that there are -- those two other accidents are 25 irrelevant and form no basis for challenging the staff's compliance

FEDW

3

4

7

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

17

with the Commission's policy statements. Since there is no other 1 basis there, if this is it, I think there is no basis stated. 2

MR. RILEY: Mr. Chairman --

'UDGE KELLEY: Let me ask to what extent -- I've looked at parts of the Impact Statement, I confess I haven't read it all --5 a diligent reader of this document, if I were one, of every page, 6 would I come away and be able to say what produced these numbers in these tables? Is your methodology really laid out in the 8 9 Impact Statement?

10 MR. JABBOUR: I think the basic assumptions that appear here, we're analyzing a core melt and under certain meteorological 11 conditions, the curves are the product of that analysis. Core 12 13 melt is -- Class 9 accident is what's being analyzed here.

JUDGE KELLEY: I understand that, I think. But you then 14 reviewed the analysis and you produced this chart and those numbers 15 16 which gives me a probability number.

MR. JABBOUR: That's correct.

18 JUDGE KELLEY: Does the Impact Statement explain in 19 detail how you got these numbers?

20 MR. JABBOUR: It does not describe the model very much 21 in detail, it doesn't describe that, no. But I think that rebaselining sheds some light on the model and its use in relation to 22 23 the Reactor Safety Study, but there is no detailed description of 24 the model here. The rebaselining study did discuss the model and 25 its relationship to the Reactor Safety Study.

1

3

4

5

FZOW

MR. JOHNSON: Let me just add to that, if you read the Commission's Policy Statement, nothing more really is required. 2 It says that detailed quantitative considerations that form the basis for probabilistic estimates of releases need not be incorporated in the Environmental Impact Statements, but shall be referenced therein, and I think that has been done. 6

000466

JUDGE KELLEY: Well what I was asking was -- this conten-7 tion says these tables understate the risk and your methodology is 8 off and I was wondering well, what is the methodology, and it's 9 thumbnail sketched in here, but a lot of it comes out of the 10 Safety Study and the rebaselining which is recalculations of risk estimates reported in the Lewis report and things like that. 12 IS 13 that a fair statement?

14 MR. JOHNSON: Yes, sir. As I understand, the DS states that they analyzed the rebaselined results against the original 15 Reactor Safety Study and found that the differences were much less 16 significant than the differences that they determined were based 17 on a margin of error. They said it was more than ten, a factor of 18 19 ten, less than a hundred.

20 JUDGE KELLEY: Does the staff have any position in light 21 of the discussion here on Contention 1, if it is read or put 22 forward as a contention which faults methodology? I have a specificity problem, I think, because I don't quite see how but I 23 24 don't believe that was in your pleading and I wonder whether you 25 have any thoughts on that in light of our discussion.

F8pw

5

6

7

8

9

10

11

20

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

MR. JOHNSON: Well, yes, I would agree with that statement that there isn't anything specific other than the reference to the Fermi and the Brown's Ferry events and without that there isn't any specificity, it seems to me.

JUDGE FOSTER: This contention seems to say that the Figures and the associated probabilities are wrong because of the use of one accident in 400 reactor-years. I'd like to ask the staff whether that frequency of accidents that is included in the text entered into the development of these figures in some way or whether these are developed from the Reactor Safety Study and in an independent fashion.

MR. JOHNSON: My impression from reading the DES was that the -- this one accident in 400 reactor-years was used, not in the evaluation as such, but a check against the results from the reactor modeling, the accident analysis modeling results, but I cannot give you a definitive answer on that, I'm sorry.

MR. RILEY: Judge Kelley, if you're interested in the
reference to Fermi, I can give it to you.

JUDGE KELLEY: Yes.

MR. RILEY: At the bottom of page 5-30.

21 JUDGE KELLEY: 5-30?

22 MR. RILEY: Yeah.

JUDGE KELLEY: Okay. If we go 1, 2, 3 and follow Mr. Johnson's pleading, where is 2 in your pleading?

25 MR. JOHNSON: Where is 2 in my pleading?

Fapw	1	JUDGE KELLEY: Yes.
-	2	MR. JOHNSON: I made myself a little index, it's on page
•	3 4 5 6	22.
•		JUDGE KELLEY: Let's just take a second to look over
345		the contention itself again.
554-2		(Brief pause.)
S.W. , REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345	7	JUDGE KELLEY: This is yours, Mr. Riley?
2002	8	MR. RILEY: If I may have a moment.
N, D.C	9	JUDGE KELLEY: Excuse me?
IOTON	10	MR. RILEY: If I may have a moment.
VASHI	11	JUDGE KELLEY: Yes.
ING, V	12	(Brief pause.)
BUILD	13	MR. GUILD: Are you talking about our Number 2 Contention?
TERS	14	JUDGE KELLEY: "The DES fails to consider"
LEPOR	15	MR. GUILD: All right.
s.w., F	16	MR. RILEY: With reference to pages 4-3 to 4-7 of the
	17	DES will supply the material, particularly I think if we refer to
300 7TH SFREET,	18	page 4-3 at this point. In the second paragraph from the end, I
300 TT	19	quote, "The applicant plans to use sodium hypochlorite to control
	20	biofouling in the cooling tower portion of the condenser circulating
	21	water system instead of gaseous chlorine, as indicated in the FES-CP.
•	22	That's change one.
	23	JUDGE KELLEY: Is that a change from the SER?
•	24	MR. RILEY: Yes, it is oh, I don't know if it's a
	25	change from the R, sir, I doubt it. My guess is it corresponds with

FLOpw

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

25

1 the -- "The planned application rate of biocide is ... (600 lb per 2 unit per day) instead of ... (300 lb per unit per day)...." There's 3 a doubling factor. As indicated in the FES-CP.

4 Then going down to the bottom paragraph -- no, let's 5 stay with this one for must a moment. "However, because of the 6 change in the form of chlorine to be applied, the proposed application rate will cause the same average 1.0 milligram per liter 7 8 of free available chlorine to exist in the cooling water as was 9 anticipated in the FES-CP." We do not challenge that, we bring it to 10 your contention because it says "free chlorine" is the name of the 11 game. "This residual is expected to vary between 1.5 milligrams 12 per liter in the summer and 0.5 milligrams per liter in the winter, 13 based upon a 3-4 milligram per liter chlorine demand."

Let's continue in the next paragraph. "Other condenser circulating water treatments proposed are (1) continuous nulfuric acid addition at ...(1350 lb per unit per day) instead of ...(1000 lb per unit per day) as proposed in the FES-CP and... possible intermittent use of...." some other chemical. Well those are all changes since the FES.

Our comment is addressed to what the staff did with this in making its environmental statement and we feel that the chemistry of the staff has simply been lacking, because if you are a chemist and you note some of the assertions and you look at Table 4.4 --JUDGE KELLEY: In the DES?

MR. RILEY: Yes, sir, 4-28. You will see a list of 30 to

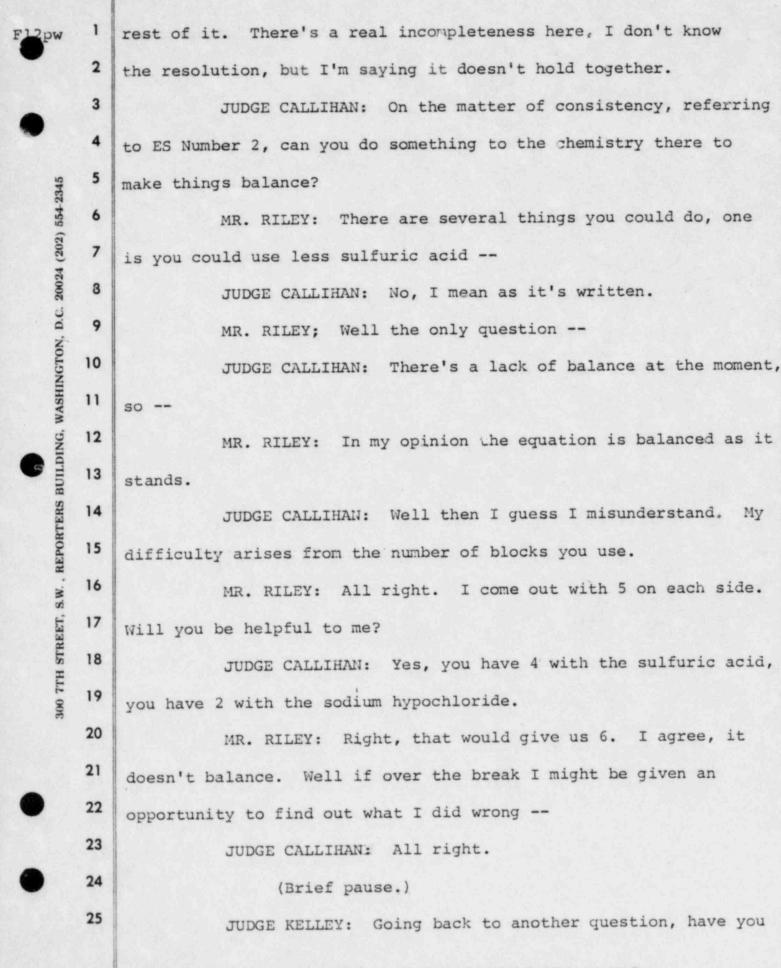
15

40 parameters there in which the average intake concentrations are 1 given, the cooling tower blowdown averages are given, and because 2 the rate of intake is several times the rate of blowdown because 3 six-sevenths of the intake is evaporated in the cooling operation, 4 you can skim down the cooling tower blowdown average concentration 5 and see the ratio to the intake is seven to one, except for such 6 things as were added, like for instance sulfate where instead of 7 having seven times ten, you have 194; like in the case of sodium 8 9 where instead of about 50, you have 72. These are all a consequence of the chemical addition that we just discussed. And by means of 10 the science of chemistry, you can tell about what the acidity 11 12 basicity of the system will be.

13 If the bench is not familiar with the pH system, I'd
14 like very briefly to describe what it is.

JUDGE KELLEY: Go ahead.

16 MR. RILEY: All right. pH is inverse logrythmic state-17 ment of the acidity of a liquid. On Table 4.5, normal range of pH is given as 7.0-8.0 and the limit is given as 6.0-9.0. You can't 18 19 put together the materials in Table 4.4 and come out with that 20 range, it will come out in the vicinity of 4 pH. So we have a 21 real internal inconsistency here which has not been resolved. There 22 is not statement made about how you're going to get from 4 pH to your preferred 7.0-8.0, or that you are going to. And if you don't, 23 you're going to have a lot of unhappy people because the environ-24 25 ment will not be kind to metal appliances, automobiles and the



F13pw

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

10

11

2

3

1 studied the Environmental Report with regard to this same problem?

MR. RILEY: I have not.

JUDGE KELLEY: Okay.

JUDGE CALLIHAN: Returning to my original question, I'd
like to make this a blanket inquiry for all consideration. Can you
relate this to the December, 1981 filing, to a contention in the
December, 1981 filing?

8 MR. RILEY: No, sir, this is a fresh contention related
9 to the DES.

JUDGE CALLIAHN: Thank you.

JUDGE KELLEY: Comments, Mr. McGarry?

MR. MCGARRY: Yes, sir. Again, we stand on our pleadings, 12 but I'd like to make some observations. The Board has asked the 13 intervenors several times if they referred to the ER and the answer 14 has been no. It's interesting at Table 4.4, in the DES, which was 15 referenced by intervenor at page 4-28, if you look in the bottom 16 17 lefthand column -- the bottom lefthand part of that table, you'll see the source of that table, ER-OL Table 3.6.1-2 -- not new 18 19 information.

JUDGE KELLEY: I'm sorry, where is this?
MR. MCGARRY: 4-28, bottom lefthand -JUDGE KELLEY: Oh, I see it.
MR. MCGARRY: Not new information.
JUDGE KELLEY: Nhat about the earlier information in
the contention itself in terms of sulfuric acid and so forth, is

that information also in the ER? 1

5

00 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

21

22

MR. MCGARRY: That information is in the ER and we would 2 also maintain that during the construction permit phase of the 3 Catawba proceeding a similar type contention was raised. 4

JUDGE KELLEY: I'm focusing on the ER in this one because Mr. Riley is saying some of the numbers were different 6 between here and there and I thought, well, never mind what was 7 in the CP, what's in the ER. If these numbers match the ER, do 8 you look beyond that, do you read this? 9

MR. MCGARRY: I guess I reference the CP only for the 10 point that the intervenors had previously expressed an interest in 11 this area, they were familiar with the area -- the topic area. At 12 least that's the point of that reference. 13

With respect to the ER, there is adequate information on 14 these points in the ER. I missed the intervenors' comment with 15 respect to the free chlorine but if I heard what he said, I under-16 stand that was a consideration to him in this contention, and I 17 just ask, is that correct? 18

JUDGE KELLEY: Mr. Riley, maybe you could just speak 19 20 to that question.

MR. RILEY: It applies to the following contention.

MR. MCGARRY: The following contention?

23 MR. RILEY: Yes.

MR. MCGARRY: The last comment we would like to make is 24 with respect to the pH discussion. We have an NPDES permit for 25



nd F.

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

Catawba. That permit authorizes a specific pH range, we cannot vary from that range. So if the thrust of the contention is inadequate pH, this is not the forum that this matter is litigated in. The Board is well familiar with the Yellow Creek decision, and we set forth this proposition in our tables.

JATGI

1

JUDGE FOSTER: Mr. McGarry, you've just answered part of the question I was going to ask, and that was whether or not this discharge was in fact subject to the State Licensing. I'd like to ask a second part to that and that is can you tell us what the State status of that permit is at the present time?

MR. MCGARRY: Yes. We have received and I believe received it in 1981, I believe it was June 29, 1981 --

JUDGE FOSTER: I seem to recall from the DES that that permit expired in 1981 as well. Was it extended by some administrative action?

MR. MCGARRY: To the best of our knowledge, we have in effect the appropriate permit.

JUDGE FOSTER: Thank you.

JUDGE KELLEY: On this report that I was just given a typed up proposed hearing schedule from the Applicant which is helpful. Did you have copies of that to spread around?

MR. MCGARRY: Yes.

JUDGE KELLEY: All right, fine. Thank you. Staff,
any further comment on -- on this?

MR. JOHNSON: Our position I think will be stated in our papers. There's virtually nothing in the DES that wasn't already discussed in the ER, so there's nothing in it, at least on timeliness and secondly, the DES clearly does consider the question of Ph acidity and balance of the chemicals if you'll refer to the cited sections in our response, and then the last point of course

JATG2

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

is that by the NPDS permit the acidity alkalidity is required to be within a range that's contrary to what it's alleged to be in the case.

JUDGE KELLEY: The fact that there is such a permit, are you saying that then is just a conclusive answer -- that's why permits can get violated from time to time.

MR. JOHNSON: I don't say that it's conclusive of what I believe the Staff I believe looked at or the way in which Ph acidity non-balance would affect the internal workings of the plant systems themselves and I think there's reasonable -- they did negotiate the reasonable assurance that an imbalance would be controlled because of the cost with plant machinery if it weren't. In other words, if there's a balance between -- you have to have enough sulphuric acid and there has to be -- that does its job, that neutralizes the alkalinity --

16

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

JUDGE KELLEY: Okay.

MR. GUILD: Judge Kelley, a couple of observations. 17 The first -- the NRC Staff is obligated to evaluate the environ-18 mental costs of the action which they propose to license and that's 19 the operation facility. Whether or not some sub part of those 20 operations is legal or is under a permit or has been approved by 21 somebody is irrelevant to their obligation underneath. They still 22 must evaluate the cost and those costs are significant and outweigh 23 the benefits then the obligation is to decide against the proposed 24 federal action, so the existance of a State NPDES process that may 25



5

6

7

8

9

10

25

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

or may not have approved this water chemistry doesn't alter the
 obligation of the Staff to evaluate whether or not drift from the
 cooling towers is going to adversely affect the environment and
 cause it costs. It must be weighed in the balance nonetheless.

In that connection, I wanted to refer the Board back to your March 5th order on Page 14 where you address this question of what the relationship between the Staff and the Applicant's obligations underneath them, and the language there in reference to Mr. Pressler's health affects contention is as follows, and I quote -- at the top of the page.

"Should these contentions go to hearing, the focus will 11 be on the Staff's Impact Statement, not the Applicant's Environ-12 mental Report" -- because the substance of NEPA obligation is 13 discharged through the Impact Statement, and that's our point which 14 we want to reiterate here and as these other contentions. Whether 15 or not the company talked about some fact in their Environmental 16 Report and whether that fact was relied upon or not relied upon 17 18 by the Staff is irrelevant.

19 The point is what was the Staff's analysis of costs and 20 benefits contained in the DES and that is what we seek to address, 21 not what Duke Power Company has to say about its environmental 22 affects in their environmental reports, and so, we view it as not 23 providing us any analysis or information that could be the basis 24 for a contention, and you told us that in March.

JUDGE KELLY: I don't think that goes to quite that. Be

JATG4

that as it may you've got 687 to deal with and I think that argu-1 ment is swimming up stream on that decision. 2

3

4

5

6

8

9

10

11

D.C. 20024 (202) 554-2345

BUILDING, WASHINGTON,

REPORTERS

300 7TH STREET, S.W.,

MR.GUILD: In fact we disagree, Judge.

JUDGE KELLEY: Fine, I understand your point, but we've been told pretty clearly if something is covered fully in the ER and you didn't file a contention at that time, then you're late now and you've got to address the lateness factors. 7

MR. GUILD: So that the ER does not do the Agency's job for it -- it's simply the Applicant's submission. We could not file a Draft Environmental Statement contention challenging the Agency's deliberative process based on the Environmental Report.

JUDGE KELLEY: That's quite true -- that's quite true. 12 The fact remains that there are judgements made in the ER and the 13 Staff comes along in many cases and may say, that's right, we 14 agree with that, we're going to put the same thing in the Impact 15 Statement, and when they do that, that's not -- there's nothing 16 new in that. 17

MR. GUILD: But, yes, but when they do that it seems to 18 me that's the point where it's our obligation to say you are wrong 19 in doing that. That's what we're trying to respond to. 20

JUDGE KELLEY: We say that 687 says your obligation 21 arose six months ago with respect to the ER. 22

MR. GUILD: Well --23

JUDGE KELLEY: Okay, difference of opinion. 24 MR. GUILD: I just would ask you to take that into 25

11

15

18

21

1 -- that view into account and your earlier instruction to us into
2 account when you read the rest of these contentions. I mean there's
3 just only so much burden can put us to and we respectfully disagree
4 with the notion that even the Appeal Board was saying you should
5 have gone back at the ER stage and guessed what the Agency's
6 Environmental Impact Analysis would be, based in part or in whole
7 on that analysis.

3 JUDGE KELLEY: Well, I think -- you know, I understand
9 your point and I hope you understand mine, and I think -- I'll
10 keep that in mind, and we'll just go on with it.

MR. GUILD: Thank you.

JUDGE KELLEY: Shall we take a stretch -- 10 minutes? MR. RILEY: Judge Kelley, may I answer Judge Callihan's question?

JUDGE KELLEY: Now or later? Go ahead.

MR. RILEY: Simply add one half 02 to the right hand side of the equasion.

JUDGE CALLIHAN: Thank you.

JUDGE KELLEY: Okay, let's take 10 minutes, no more than20 10 minutes.

(A short recess was taken.)

JUDGE KELLEY: We're back on the record. We'll take up with Contention #3 concerning Chlorine and maybe the approach here that would do best and clear and straight forward it seems to me, we've got opposition papers suggesting that it's been covered in the

JATC6

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

ER and we can read that ourselves. We don't have to discuss that part of that. Would you like to comment otherwise on the oppositions to this contention?

MR. RILEY: Yes, I would, Judge Kelley. If you would 4 5 take a glance back about the equasion in #2 and it explains the nature of the problem. The chemical reaction -- if you beef up 6 things on one side of the arrow, it moves away from that. 7 In other words, it moves in the direction of relieving that low, and 8 so if you add more sulfuric acid to the sodium hypochlorite, you 9 make more chlorine. If you have less sulfuric acid in the equi-10 librium you have less less chloride, and the name of the game is 11 to get enough chlorine there to discourage the growth organisms. 12 primarily Corbicula, so what you want is a really neat position 13 there where you have just enough chlorine to take care of the 14 15 Corbicula but not too much.

Now, moving on to Contention #3, the table that is associated with this discussion, the table that we looked at previously, shows the chlorine moving out of the system -- this is about two-thirds the way down the table in the form of chloride ions --

JUDGE KELLEY: This is Table 4.4?
MR. RILEY: Yes, sir.
JUDGE KELLEY: All right, thank you.
MR. MCGARRY: 4.2. 4.4?
JUDGE KELLEY: 4.2 or 4.4?

IA	-	~	-	
TΔ		62	1	
_	6 B (C)	ca.		

D.C. 20024 (202) 554-2345

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON,

15

21

1

2

MR. RILEY: 4.4.

JUDGE KELLEY: Page 4-28, right?

MR. RILEY: Right. Now I have to make a correction in 3 the -- pertaining to the drift, when I referred to Table 4.2 I 4 should refer to table 4.4. If there is enough chlorine to take 5 care of the Corbicula in the water, as six-sevenths of the water 6 that comes in is evaporated -- the question is where is that 7 chlorine going, and our position is that that chlorine is going 8 in the atmosphere along with the evaporated water. How much will 9 be going is not addressed through the DES by presumption of the 10 11 DER.

I think this is an extremely large unsatisfied area of information, enough to drive a truck trough so to speak, and it should be addressed.

JUDGE KELLEY: Thank you. Mr. McGarry?

MR. MCGARRY: We stand on our pleading, but we would simply again reference Tab 4.4 which was provided by by the Intervenor, it's clearly an EROL document and so states. If he had a concern in this area there was the information in the ER and he could have raised it at that point.

JUDGE KELLEY: Mr. Johnson?

MR. JOHNSON: I would like to point out that on Page 5-50, Section 5.4 J.1, there is a statement concerning monitoring program of cooling tower drift which would apply not only as we have indicated to the Contention #3, but also Contention #2, in



300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

terms of whether the Staff considered possibility of affects, 1 adverse affects to the environment. In addtion, I would like to 2 point out that one of the presumption -- assumptions in the Con-3 tention #3 is there will be a chlorine gas and I'm informed by the 4 Staff that according to the Handbook of Chlorination by C. White, 5 1972, Chapter 4, Chemistry of Chlorination, above pH 6 the reaction 6 products of chlorine do not include molecular chlorine, so that 7 if the pH is balanced in the way in which it is indicated, that 8 9 it will be, that you wouldn't have chlorine gas.

JUDGE KELLEY: Let me ask you -- what if -- we're in a moment of deciding contentions on the merits, give the Staff note that we're still looking at them as adequate on their face so to speak -- should we be concerned with your last reference -- well, at all?

MR. JOHNSON: Well, I offered it -- admittedly, it does somewhat go to the merits whether they're correct in what they say but it also is relevant whether some standard book on the subject demonstrates that what they're stating is an impossibility.

MR. MCGARRY: Judge Kelley, if I may be heard, because we take the same position in many of these contentions and our position simply, we think that we have an obligation to point out to the Board if there has 'een a mis-statement and because there has been a mis-statement then we reach the next conclusion -- there is no basis for the contention, so you're not going to the merits, you're going to the basis. While I've interrupted for a second, just to



REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

300 7TH STREET, S.W. .

19

25

1

2

3

4

5

clear up one further area. On Pag 5-50, Dr. Foster, if you'll note in Section 5.14.2 that the last sentence talked about the NPDES permit. It says the permit has been extended by the State. So there is an NPDES permit in effect.

JUDGE KELLEY: Well, let me just comment and I won't belabor this, but looking at Contention addressed in the Disclosure 6 type document, it does seem to be a little bit different to apply 7 this rule about merits or not. I got the feeling in some of the 8 pleadings that I was being led into the merits and I wasn't sure 9 whether I ought to go there, so let me just state a caution, and 10 that's something I'm a little bit uneasy about, but my feeling was, 11 let's say a contention says, your Impact Statement is wrong because 12 your analysis to the chlorine diffusion is off and doesn't consider 13 such and such practical, and you come back and say, oh, no, that 14 factor isn't being used anymore, see the attached text book, and 15 then my reaction would be let's see you at the summary disposition 16 stage, and maybe you're right, but I can't resolve it now. 17

18 But that's a general concern -- but, you know --MR. MCGAI Y: We share that concern and I think the case law supports that concern. We just, again, would go back and say 20 it's a matter of judgement and so clear -- and our position would 21 be it goes to the basis -- is there a basis, and there is no basis. 22 It's clear on its face, there isn't a basis, to you, the decision 23 24 maker.

> I think that all of us know what we're JUDGE KELLEY:

20024 (202) 554-2345

D.C.

WASHINGTON,

BUILDING,

S.W., REPORTERS

300 7TH STREET,

11

1

talking about.

MR. GUILD: Judge Kelley, we strongly object to the 2 notion of attempting or being forced to prove our case at this 3 stage of the pleading and would cite to the Commission, the Grand 4 Gulf Decision, passing upon the question as to whether an Inter-5 vention petition should be granted and the weighing of the con-6 tention. It is not the function of the Licensing Board to reach 7 the merits of any contention contained therein. Section 2.714 does 8 not require the petition to detail the evidence which will be 9 offered in support of the contention. 10

JUDGE KELLEY: Right.

MR. GUILD: It's enough that as here the basis for the contention respecting the inadequacy of the consideration of X is identified with reasonable specificity and that's a 1973-80 C Case and we believe that there's nothing that has intervened since then in terms of decisional authority alters that burden of Intervenors.

18 JUDGE KELLEY: We'll attempt to apply that principle.
19 Okay.

20 MR. CALLIHAN: Mr. Johnson, with apology what was your 21 reference to the monitoring program?

MR. JOHNSON: Page 5-50, Section 5.14.1.
MR. CALLIHAN: Thank you, and Mr. Riley, is this a -is this a new contention or is this related to one of the earlier
ones?

•	1	MR. RILEY: This is a new contention, sir, and inciden-
JATG11	2	tally, 5.14.1 refers to infrared photographs of the area. It seems
•	3	to me it's totally irrelevant with respect to the matter at issue.
20024 (202) 554-2345	4	It's monitoring but it's not monitoring what we're after.
	5	MR. JOHNSON: Well, may I respond to that?
	6	JUDGE KELLEY: Yes.
	7	MR. JOHNSON: I think we're talking about impacts Mr.
	8	Riley himself is worried about dilatorious impacts and this may be
WASHINGTON, D.C.	9	a method for doing that.
OTON	10	MR. RILEY: And it may not be.
VASHI	11	JUDGE KELLEY: Well, let me ask you, Mr. Johnson, the
	12	thrust of the contention as I understand it is that the Inter-
BUILDING	13	venors are saying that chlorine is a noxious gas substance, and
	14	a lot of it is going to be coming out in these cooling towers and
REPORTERS	15	there isn't any analysis for chlorine per se in here. You talk
S.W. , F	16	some about salt. You've got a monitoring program, but there's
	17	nothing in here about chlorine to speak of, or at all I'm not
300 7TH STREET,	18	sure which of the two it is.
300 77	19	Now are you saying well, first, is there any discussion
	20	in here at all other than a reference to chlorine in Table 4.4 to
-	21	chlorine drifts?
•	22	MR. JOHNSON: There's a discussion on Page 4-7. It says,
-	23	"The applicant will control the discharge concentration of total
	24	residual chloring in the cooling tower blowdown by interrupting

25 system blowdown during the time of application of biocide,"

1 JUDGE KELLEY: I'm sorry, I'm trying to stay with you. Where is this? JATG12 2

MR. JOHNSON: At the very top of Page 4-7.

JUDGE KELLEY: Okay.

3

4

5

6

7

8

9

11

23

00 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

MR. JOHNSON: My reading of that is that the Applicant is saying that he is guite concerned that the minimization of the amount of residual chlorine that comes out of the -- in the discharge during the blowdown and that that be adjusted to minimize the residual chlorine concentrations.

10 MR. RILEY: I think in simple language, Judge Kelley, it means that the liquidity fluent will have less than .1 milligram per liter of chlorine but it doesn't say anything about the gases. 12 The best way to get the level of liquid down is to evaporate it 13 14 into the atmosphere.

JUDGE KELLEY: What I'm trying to get at is, is it the 15 Staff's position that chlorine blowdown whether liquid or gaseous 16 17 is a trivial matter in this case and need not be the subject of 18 any extended consideration?

19 MR. JOHNSON: I believe that is the Staff's position. JUDGE KELLEY: Is it the Intervenors position that it's 20 non-trivial, that it's serious and ought to be analyzed in greater 21 22 detail?

MR. RILEY: Correct.

24 JUDGE KELLEY: That helps me.

JUDGE FOSTER: For clarification, is it a correct under-25



3

4

5

6

standing of ES-3 that the concern that you have is related to the 1 atmospheric concentration of chlorine as contrasted with the equatic concentration?

MR. RILEY: That is right.

JUDGE KELLEY: Okay, #4 is a contention about the use of metric systems. This is the one at least that I had in mind earlier when I referred to a contention that might be a helpful 7 8 clarifying comment, it might not, but I didn't see it as a subject 9 of litigation. I made the suggestion that you consider the comment 10 and see whether you didn't agree with that suggestion with re-11 spect to some of the contentions, or whether you don't. I think -- I think, at least on this one, are we in agreement that we 12 13 don't see this as a litigation contention?

14 (Judge Kelley, Judge Callihan and Judge Foster confer.) 15 JUDGE KELLEY: The Board doesn't see this as a subject 16 ot litigation, and of course, we may just have to make a formal ruling on it, but that's our view. Mr. Riley, let me ask you 17 whether you've given that further thought -- to my earlier state-18 19 ment, and what your reaction would be? I would just as soon pass 20 this and move on to a more substantive -- move on a litigation, 21 if you will, litigation type point.

22 MR. RILEY: I think we can dispose of this readily. I'm 23 trying to call attention to the fact that when you look at .3 24 cubic meters per second, you have a very different impression than if you look at 28,500 tons a day. All I'm saying is I'll be 25



1

2

3

4

5

6

7

8

9

10

11

20024 (202) 554-2345

D.C.

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON,

satisfied if there were uniformity in expression in units. I will be glad to withdraw this as a litigative contention, because I think that the positions that have been taken are very reasonable positions. I did want to call this to the attention of the Board.

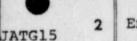
JUDGE KELLEY: Let me ask the Staff -- is there a practice or are you under any requirement to deal in metrics -- I don't know.

MR. JOHNSON: I saw it somewhere just recently that the Reg Guide, 4.2, I think it was in the Applicant's pleading, where -- the direct use of metric --

MR. MCGARRY: Right.

JUDGE KELLEY: Of course they don't have the force of law.

MR. GUILD: Judge, let me add only this point. It's our 14 view that when the Staff publishes a Draft Impact Statement for 15 comment, the function of that statement is to solicit critiques 16 and comments from the general public as to what they believe -- the 17 Staff believes, to be the adverse impacts of the action that they 18 propose to take. In this instance, one reflection of what we 19 think is a choice of terms that tends to mitigate or minimize the 20 impact as to the reader and we just think in fairness if the Staff 21 uses a uniform set of units of measure and is consistent in that, 22 the reader gets a fair understanding of what the Staff's appraisal 23 of impacts is and will distinguish the significant from the in-24 significant and focus attention on the ones that are significant. 25



REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

300 7TH STREET, S.W.

1

3

4

5

7

8

MR. RILEY: Let me clarify this. It isn't metrics versus English that's involved here. Let me point out. It's seconds versus days and we can talk about 26,000 metric tons per day and be talking about the same thing.

JUDGE KELLEY: Let me make sure I'm with you. Let me find your contention there. Go ahead. 6

MR. RILEY: Would you like me to address the Contention 5 now?

JUDGE KELLEY: Let me just express agreement with the 9 broad principle. My personal agreement -- the FES ought to be 10 written not necessarily in layman's language, but at least so 11 that people can understand. We're going to make some intellectual 12 effort, but you ought to take a term that carries with it a meaning 13 to someone, and there lots of ways to do that and lots of ways to 14 point out whether it's seconds or hours or days, and I think the 15 Staff -- I'm sure they are aware of that, and would seek to do it 16 to the extent that it may not have been done in all places here, 17 we should consider your comments. Okay, why don't we go on to #5. 18

MR. GUILD: Mr. Riley speaks for both CESG and Palmetto 19 in withdrawing this as a proposed contention for litigation. This 20 -- we simply wanted to bring it to the attention of the Board. 21

JUDGE KELLEY: Okay, fine. Are you speaking of #5 or #4? 22 MR. RILEY: #4. 23

JUDGE KELLEY: You're speaking of #4. You're back to 24 that. All right, #4. Okay, #5. Is the first sentence really a 25

JATG16 1

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

2

problem, Mr. Riley. I saw some explanation of why this was being done.

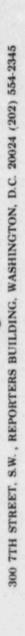
MR. RILEY: I think that's rather a nigley detail, but 3 4 the important thing is the 25 percent difference. Now that is 5 based on new information. On July 19, this year, the Staff ad-6 vised the Applicant that McGuire was to be run at no more than 75 percent of graded power. The steam generators in Catawba Unit 7 8 1 are the same steam generators as in McGuire Units 1 and 2, and apparently the problems are generic as encountered in a Swedish 9 10 steam generator, encountered with Spanish steam generators, and 11 these are all referred to in Staff's correspondence with the a-plicant and it seems very reasonable to anticipate that Catawba 12 13 unless there is some major change in circumstance, will be subject to the same operation provision. This makes for a very serious 14 difference in the benefits of the plant in terms of the turning 15 16 out more or less three-quarters as much as it was expected to 17 turn out.

18 The Staff had some problems with 60 percent and 75 per-19 cent and apparently thought the capacity factor was being referred 20 to full time. 75 percent is maximum output, 60 percent is 21 capacity benefit.

JUDGE KELLY: Maybe you've already said this, and I'm just not grasping it yet, if you reason that the Catawba Units should be rated from 75 percent number because of the McGuire problem, what capacity factor does that give you?

	1	MR. RILEY: It doesn't. The capacity factor is based
ATG17	2	on other things, but the general experience
	3	JUDGE KELLEY: I'm sorry, that's how much of the time
-	4	you run.
45	5	MR. RILEY: Exactly. Exactly.
554-23	6	JUDGE KELLEY: But what about if you had electrical
(202)	7	output, it takes you from what to what if you crank in 75 percent
20024	8	instead of 100?
W. , REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345	9	MR. RILEY: It takes you from 12 million Mwt. hours per
GTON	10	year down to 9 million, and if you'd like a cite, it's in one of
ASHIN	11	the DES tables.
NG, W.	12	JUDGE KELLEY: It cuts you by 25 percent almost by
Intro	13	definition.
ERS B	14	MR. RILEY: Exactly.
PORT	15	JUDGE KELLEY: All right.
W. , RF	16	MR. GUILD: That's assuming it runs the same number of
ció	17	hours a year as it would at full capacity.
300 7TH STREET,	18	JUDGE KELLEY; Okay, but it's 25 percent cutback in net
HTT 0	19	output.
30	20	MR. GUILD: Yes, sir.
	21	JUDGE KELLEY: That's a rather straight forward point.
	22	Mr. McGarry, you want to speak to it?
	23	MR. MCGARRY: We stand on our responses, two observations
	24	with respect to capacity factors. The capacity factor, there
	25	embraces the concept that there will be plant down time for various

J



ATC

1

3

4

5

9

10

reasons. This would be one of those reasons, and it's averaged over the life of the plant, but the important factor with respect 2 to this contention, is that it's not new. The Intervenors have known about the steam generator -- the steam generator situation for over a year and indeed Mr. Riley is on the service list at McGuire and received the documents concerning steam generators 6 back in September of 1981, and I guess the last one is the 7 particular rating of McGuire has been in place for over a year. 8

JUDGE KELLEY: Mr. Johnson?

MR. JOHNSON: We have nothing to add.

JUDGE KELLEY: Let me ask you this question. If you 11 assume the validity of Mr. Riley's thesis and if you wanted to 12 look at this just like it -- just like McGuire, and knock it down 13 25 percent, and if you took both numbers, 9 million instead of 14 12 million and you look at the cost benefit resulting from that, 15 does it still hook the balance in favor of the plant, but does 16 this change -- does the rating effect change in the cost benefit 17 analysis, to such a degree? What can you say -- I don't know. 18 MR. JOHNSON: You're not asking me whether -- suggest 19

the question of whether it's a temporary problem or --20

JUDGE KELLEY: Not really -- I'm asking you -- maybe it's 21 pretty hypothetical -- maybe it's unfair, but I'm simply saying, 22 well, can you just say, so what, so it's down 25 percent, we still 23 less -- is that what the Staff concluded -- or have you done that 24 analysis? 25

JATG19

4

5

9

10

11

12

REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

100 7TH STREET, S.W.

MR. JOHNSON: Well, that occurred to me, Your Honor. 1 that you had 9 million Giga-Watts if that's what it is, instead 2 of 12, it seems to me that you would still have no large benefit 3 in terms of cost benefit analysis. That wouldn't change from large to something small. It certainly wouldn't be nill.

6 JUDGE KELLEY: I'm thinking of a case, Pennsylva 1a 7 Reactor I think -- well, on the river follower where the river goes up and down, and when the river is up you run it and when 8 the river is down you shut it off, and they had to do an analysis on that and they came out with like 50 percent in. ... ead of 75, and still came out licenseable, so I just wondered if this was such a dramatic change that it changes the results.

13 MR. JOHNSON: I think that we analyze the use of 60 percent and you'll average the capacity factor for the analysis 14 15 which I believe is the information that we've used in the ER, and beyond -- it seems to me that that takes care of any problems, 16 17 especially if you consider the fact that this slightly -- and beyond 18 that cur position would be that you don't consider this problem 19 because it's too remote.

20 JUDGE KELLEY: Doesn't that Impact Statement address 21 this point in steam generators, de-rating at McGuire and so forth, 22 factoring in some way into the likelihood of the availability 23 of this plant? No explicit discussion of the point?

24 MR. GUILD: Judge Kelley, our point is that that there 25 was their obligation and our contention arose when they did not

1 meet that obligation by addressing that point in some form or JATG20 2 fashion, and that arose in August of 1982 when they published this analysis without taking into account reduced capacity factor 3 and operation level to be rated. 4 JUDGE KELLEY: In the actual derating of McGuire, the 5 20024 (202) 554-2345 6 Staff ordered -- issued when? MR. MCGARRY: I have the document, Judge, if you wish 7 8 to see it. D.C. JUDGE KELLEY: Is that a Staff document or a Staff 9 300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, 10 letter? MR. RILEY: Yes, it is. 11 JUDGE KELLEY: Okay, what's the date? 12 MR. RILEY: July 19. 13 JUDGE KELLEY: Of '82? 14 15 MR. RILEY: Right. JUDGE KELLEY: From Mr. so and so to --16 MR. RILEY: To Mr. William O. Conker from Darrell D. 17 18 Isonhawn (ph). JUDGE KELLEY: Okay, thank you. 19 MR. GUILD: Just so the record is clear, that's a continu-20 ation of a rating and derating action from McGuire and the Inter-21 venor -- I don't want the impression created -- it was not until Jily 22 of 1982 that they were aware of this. I don't think Mr. Riley would 23 tell this Board that's the case. They have been aware of this 24

000494

25 since July or September of 1981. The plant didn't operate until

1 December of '81 at all.

JUDGE KELLEY: I'm not sure that we want to relitigate ATG21 3 the -- all the details of that particular matter.

4 MR. MCGARRY: The Court can give consideration of when
5 they knew about it.

JUDGE KELLEY: We'd just like to sort of nail it down
without spending a lot of time on it. The official Staff -- the
official order from the Staff saying, don't let that run over 75
percent -- was that the letter that Mr. Riley just referred us to?
MR. MCGARRY: I don't know.

MR. RILEY: Do you wish to see it, Judge Kelley?
JUDGE KELLEY: If I know the date I can always get it,
if that's your copy, why don't you keep it. I'm sure we can find
it. Thank you anyway, but just keep it.

MR. RILEY: Judge Kelley, in this earlier period that Mr. McGarry refers to, there are several phases. At one point there was -- their limit was 50 percent over a period of perhaps 30 days and then there was permission, based on their request to go up to 75 percent for a very brief period, take the plant down to see what was happening, it was subsequent to that they received this authorization to operate at 75 percent rating.

JUDGE KELLEY: That's doubtful. I think if we decide that this is really significant, what I suppose we would do is call on Mr. Johnson to give us the Staff's brief one page, double spaced history of what went on with a copy to everybody else, if we

ALDERSON REPORTING COMPANY, INC.

00 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

JATG22

20024 (202) 554-2345

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C.

16

decide it's significant. I don't want to make a big thing out of
 what might not be a very big thing, but I'd like to -- I guess I
 know enough. I know as much as I think I want to know right now.

MR. MCGARRY: One point I just found out and I'll be 4 quiet after this, is we're authorized to operate up to 100 percent 5 now. There's never been an official order saying you can only 6 operate at 50 or 75 percent. It's been through voluntary actions 7 of Duke Power Company working with the NRC to resolve this pro-8 blem that we've voluntarily gone down to 50 or 75 and it's been 9 flopping back from there, but our license authorizes us to go to 10 100 percent. 11

JUDGE KELLEY: The letter though that Mr. Riley referred you to we could look at that and get a pretty good handle on --MR. MCGARRY: That's one of many letters that have taken place since mid 1981 that Mr. Riley has been sware of.

JUDGE KELLEY: Okay, let's pass on from here.

17 MR. MCGARRY: Judge, actual reading, and I again apologize for breaking protocol, but there about three contentions now that 18 have come in and we characterize them Need for Power contentions. 19 Our position is clear and the facts and regulations, you've told 20 before this Board the facts and regulations and in the spirt of 21 moving this along and -- along with the Intervenors -- I think we 22 ought to group these contentions and that's our position and we 23 ought not to waste that much time on it -- they're contentions 24 that we have been over many times. 25

	1	JUDGE KELLEY: You're referring to #6?
JATS23	2	MR. MCGARRY: #6, #7, #8.
	3	JUDGE KELLEY: #7, #8, and the Applicants basically
•	4	contend that those are impermissible Need for Power contentions,
345	5	and you elaborate upon that a bit later if you want to do that.
20024 (202) 554-2345	6	MR. MCGARRY: Yes.
1 (202)	7	JUDGE KELLEY: I just want to take a half a minute to
	8	look through these.
4, D.C.	9	(Brief pause)
WASHINGTON, D.C.	10	JUDGE KELLEY: Mr. Riley, can you tell me what a bus bar
VASHI	11	cost is?
	12	MR. RILEY: Yes, sir, it's costs of all elements going
BUILDING.	13	into producing the Kilowatt hour of energy at that point leaving
	14	the station. That means salaries, it means return to investor,
S.W., REPORTERS	15	it means fuel costs, it means the investment
S.W. , H	16	JUDGE KELLEY: That's a very strange phrase.
	17	MR. RILEY: It comes from the electrical industry, sir.
300 7TH STREET,	18	JUDGE KELLEY: Okay. Mr. Riley, you can speak to these
300 7T	19	two, or the combination of the two?
	20	MR. RILEY: Yes, sir.
	21	JUDGE KELLEY: You're familiar with the Applicants and
•	22	the staff's papers and the Applicant stated this position on the
	23	need for power ground. Perhaps you could speak to that general
•	24	point.
	25	MR. GUILD: Yes, sir, let me start by responding to

JATG24

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

Mr. McGarry's observation. We of course maintain that if forced 1 to demonstrate a need for the facility, the Applicants would have 2 been able to do so. We recognize that the Commission for whatever--3 for the wisely or otherwise has barred consideration of need for 4 power issues at the OL stage. We may dispute the wisdom of that 5 but that's been done. A number of our contentions that were 6 otherwise litigatable were dismissed because of that intervening 7 rule. 8

9 The Staff's Impact Statement as most Impact Statements 10 do, says under the section "need for the action" that they no 11 longer have to analyze the need under that rule, and there's a 12 blank page, however, consistent with NEPA --

JUDGE KELLEY: That really makes the point doesn't it? 13 MR. GUILD: It certainly does. Consistent with NEPA, 14 15 the Staff still must have a benefit to balance all of the environmental and other costs against, and they perform a benefit analysis, 16 and that's the point that Mr. Johnson had reference to when he was 17 talking about 12 billion versus 9 million Giga-watts of electricity, 18 a large benefit. It's our position that these series of conten-19 tions challenge the Staff's assumptions about the magnitude or 20 the existance of those benefits, So it's not need for power that 21 we assert, or lack of need for power that we asser here. We'd 22 like to, but we can't. What it is we assert is that they have 23 erroneously weighed or analyzed the alleged benefits of the action 24 that they have under consideration, and I at that will defer to Mr. 25

JATG25

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

Riley to speak to the specifics.

MR. RILEY: Yes, referring to the --

JUDGE KELLEY: Excuse me just a minute. I want to ask Mr. Guild one question. In NEPA cost benefits calculus, you have to put benefits on one side and cost on the other, right, and come out with a favorable balance, are you saying that the Commission's rule also excluded demonstration of amounts of power a plant would produce for purposes of looking at benefit?

MR. GUILD: No, sir, it didn't, and the Staff understood and must agree with that position because they do --

A	hl	1	MR. GUILD: No, sir, it didn't, and the staff understood
•		2	and must agree with that position because they do put that calculus
		3	in the amount of electricity and the value of that benefit.
		4	JUDGE KELLEY: Okay, and so as you look at, I guess,
	345	5	what the staff concluded is assuming that it is needed.
) 554-2	6	MR. GUILD: Yes, sir.
	20024 (202) 554-2345	7	JUDGE KELLEY: Saying, total output will be sold in
	2002	8	one way or another and that can be looked at as a benefit.
	N, D.C.	9	MR. GUILD: They add in a number of factors on the benefit
	WASHINGTON,	10	side of the scale, jobs, tax dollars, and electricity, etc., and
	NASHI	11	we challenge a number of those points in terms of magnitude or
		12	existence of those benefits through these contentions.
•	TERS BUILDING,	13	JUDGE KELLEY: Go ahead, Mr. Riley.
		14	MR. RILEY: This is summarized in Table 6.1 of the
	REPORTERS	15	DES.
	S.W. , 1	16	JUDGE KELLEY: What page is that on?
		17	MR. RILEY: 6-4.
•	300 7TH STREET,	18	JUDGE KELLEY: Pardon?
	300 71	19	MR. RILEY: Page 6-4.
		20	JUDGE KELLEY: Okay.
		21	MR. RILEY: And the staff assessment of the benefit
		22	of the electrical energy is given as large and that raises a question
		23	of what size would it be at 9 millionI am sorry, 9 billion
		24	kilowatt hours per year.
		25	Our position for Contention 6 is that using the Applicant's
			이 같은 것은 것은 것은 것은 것은 것은 것을 하는 것이 같이 있는 것이 같은 것이 같이 있는 것이 같이 많이 많이 많이 많이 많이 많이 없다. 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다.



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

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

present forecast that growth--the fact that McGuire II is yet to go on line, by 1985, there will still be around a 3 percent reserve. It seemed that the fear of striking a balance of costs in the magnitude of 12 or 9 billion kilowatt hours should be taken into consideration.

JUDGE KELLEY: Are you saying as a legal matter that it is not proper for the staff to measure the full output for this plant subject to a capacity factor of some kind?

You just assume that full output is going to get sold and there is a benefit of some kind?

MR. RILEY: I am saying something very like that. I am saying that our best present information is that we have no reason or no assurance that that plant will not be de-rated 25 percent.

> JUDGE KELLEY: Lets put that part to one side. MR. RILEY: Okay.

JUDGE KELLEY: Go ahead.

MR. RILEY: Now, if McGuire II is present, given the present rate of growth.

JUDGE KELLEY: Now that's the point, annual growth. . That is what need for power is all about, isn't that right? MR. RILEY: May I continue just a moment because it will look alot less like that?

If there is a great surplusage of power, whether it is 9 billion or 12 billion kilowatt hours per year that they have,

RA h3

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

25

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

they are going to have to shut down other facilities, and if they are going to shut down other facilities, that is a cost in it for them, so a cost benefit consideration.

JUDGE KELLEY: And if they have to shut down other facilitites, it will be because there isn't enough need for power and that will involve this Board in figuring out need for power which we have been told not to do.

MR. RILEY: It is a real catch-23 situation. I mean, if I may say so, it's absurd to disregard the need for power when you are talking about capacity for generating power.

JUDGE KELLEY: Well, okay.

MR. RILEY: But if you have a 12 billion dollar or a 12 billion kilowatt hour, or a 9 billion kilowatt hour on the positive side added to the system, added to the society, added to the community, and yet you take away a 12 billion kilowatt hour because you shut down other facilities, you have to put that into the calculus somehow and that is the point of this contention. You can't just add a plus in and ignore the minus. Either it is a neutral figure or it is something less than the 12 billion the staff uses and that is the basis and the point of the assertion.

Or to be very liberal about it, under the cost column, 21 one can see a large offsetting cost in terms of, you might say, 22 a negative 9 to 12 billion kilowatt hours accumulated capacity. 23 JUDGE KELLEY: This is when McGuire gets shut down? 24 MR. RILEY: When McGuire gets shut down or Blues Creek

1 gets shut down, whatever the plant is shut down, you make a justi-2 fication for operating Catawba.

JUDGE KELLEY: So we are supposed to sit here as a Board and decide when McGuire is going to be shut down?

I didn't suggest it would be McGuire, sir.

MR. RILEY:

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

JUDGE KELLEY: Well, if it were to go beyond McGuire, and they are down the road here, now what else are we supposed to speculate about? That's why they got into this as I understand it.

MR. RILEY: It is simply this. If Catawba is to go on with its energy output at the time they say it is, something else is going to go off. The public has already paid a lot of money for that something else and anyway you slice it, that's a cost to the public, and it should show up in any balancing event that's in cost.

JUDGE KELLEY: I don't see how you get around a big litigation on need for power under your thesus, I just don't understand it.

MR. RILEY: Well, perhaps you can help--

JUDGE KELLEY: You could file a petition for a waiver of the Commission's rule explaining why they were misguided, they didn't understand and that we should look at it differently, but I think--

24 MR. RILEY: Not using the phrase of your need for trans-25 portation, lets assume you have a perfectly satisfactory 1975

Chevy and somebody comes along and sells you on a nice new 1983
 Coup-de-Bee(sic). All right, while there has been a benefit,
 there has also been a loss because that Chevy isn't going to see
 anymore use. It is that sort of situation. It is a displacement

effect.

5

6

7

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

JUDGE KEILEY: Maybe the Chevy keeps right on driving, maybe my kid turns 16, who knows? You know, there are ways.

8 On 7 then, maybe you ought to restate 7. This seems
9 to me somewhat different thrust.

MR. RILEY: Well, the DES finds an economic benefit 10 for the plant because it only associates with the plant's operation 11 fuel costs and operation and maintenance costs, that is Section 12 6.4.2.1. But certainly if you take a look at real cost and real 13 benefit, it is the public that benefits by the availability of 14 electricity. It is also the public that pays the cost for it, 15 and what we are saying here in 7 is that the fixed charges should 16 not have been ignored with respect to figuring cost benefit. 17

There are two aspects to this. The company has an equity 18 on the order of 35 to 40 percent in the Catawba plant. Under 19 North Carolina Utility law, they are permitted earnings, based 20 on their equity for plants that go into the rate base. What it 21 means is that in the real world if a plant operates, the customer 22 is going to have to pay more for electricity from that nuclear 23 plant than he would have for the coal plant that had to be retired 24 and this certainly is a cost. 25

JUDGE KELLEY: I just want to make sure I understand your point. Insofar as the Impact Statement claims there is a benefit, electricity at a reasonable cost, even at a low cost, you have to look at costs, I assume.

h6

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

MR. RILEY: What the consumer pays. In other words, the customer pays fixed charges along with operating and fuel costs. He doesn't just see the operating and fuel costs. He sees the whole bit.

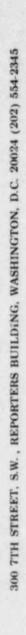
JUDGE KELLEY: All right, in fixed charges now, what am I going to find in fixed charges that the staff hasn't included in the Impact Statement?

MR. RILEY: There is no statement about the earnings level to be associated with that component in the fixed charge. If the plant is not permitted to operate, the customer's charge will be less and the electrical supply will be the same.

The door is open to that by the third item under direct benefits where it is stated that they will reduce generating costs, but leaves out the fixed charges component, so the customer is going to see a bigger bill, not a smaller one.

JUDGE KELLEY: I wonder if you could be real patient with me and tell me again what fixed charges includes? Are we talking now of North Carolina Utility Law, could you answer that question? Is that right?

24 MR. RILEY: That certainly is part of it.25 JUDGE KELLEY: Okay.



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

MR. RILEY: The fixed charges are the installments of capital costs or the borrowing to build the plant. Part of that borrowing is done through what is known as mortgage and refunding bonds, part of it is done through preferred and preference stock, part of it is done through the sale of common stock. Now the common stock is the company's equity, it's their share of it and they are permit to make earnings--they have been asking for 17-1/2 percent of this portion of their equity. Those would all be in the category of fixed charges and they will be the same whether the plant generates the coal or not. JUDGE KELLEY: So you are saying, are you, that the

Impact Statement distorts, it doesn't accurately state the cost of this electricity?

MR. RILEY: Exactly right.

JUDGE KELLEY: And that therefore the benefit side is inflated to the extent that that is true.

MR. RILEY: Right.

JUDGE KELLEY: Are you saying that it crucially affects the balance or merely that it has some effect?

MR. RILEY: I am saying it has a very significant effect. JUDGE KELLEY: Mr. McGarry?

MR. MCGARRY: We stand on our pleadings, page 29.7. This Board has already ruled on this exact contention. The big point is we are talking about some cost, construction costs, capital costs. That is not appropriate at this stage of the proceeding

	1	and sts back to
	2	JUDGE KELLEY: Mr. Johnson?
	3	MR. JOHNSON: I have nothing further to add.
	4	JUDGE KELLEY: Okay.
2345	5	JUDGE CALLIHAN: Mr. Riley, would you read to yourself
REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345	6	the penultimate sentence in number 7? To me there is something
	7	missing. "A difference between" what?
	8	Or between the FES and what?
	9	MR. FILEY: "A difference between", okay. I haven't
	10	read that sentence, I am sorry.
	11	(Brief pause.'
	12	Yes, sir, there is something missing.
	13	Please insert after "CP FES", and the OL DES, "and
	14	the OL DES is that it provides a capital cost figure for Catawba
	15	of \$1,055,272,000".
S.W	16	JUDGE CALLIHAN: So it now reads, "A difference between
	17	the CP FES and the OL DES"?
H STR	18	MR. RILEY: Yes. Let me put it in more straight forward
300 TTH STREET,	19	language. There was a considerable discussion of capital cost
e 1	20	in the construction permit stage environmental statement, something
	21	like five different alternative configurations of the plant are
	22	looked at and each one is priced out.
	23	The capital cost has strangely disappeared as a considera-
	24	tion from the current draft of our little statement. We have
	25	no sense of what that plant is estimated at, and I am saying that

R

h9

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

although that may not be absolutely essential figure to making a finding, it does provide some perspective of what the cost in the plant is and it can lead to consideration of fixed charges.

JUDGE CALLIHAN: This certainly has a familiar ring to me. How does it relate to your earlier contention?

MR. RILEY: I wouldn't be surprised but what there is some overlap but the point here is, the Draft Environmental Statement has changed from construction permit stage and it is made in judgment that involves this, and the judgment from our point of view is a favorable one in that it makes the cost of power appear to be less than it is.

JUDGE CALLIHAN: Now would you address my remark as follows, but much of this cost of construction of Catawba has already been expended; how does that get plowed back into this description?

MR. RILEY: I would agree completely with your remark and I would refer back to our first contention filed in December of last year in which we sought the earliest possible termination of activities at Catawba I and Catawba II to keep this fixed cost from going further. I feel the greatest public benefit would be there.

JUDGE CALLIHAN: That was a familiar ring. Thank you. MR. GUILD: The record should reflect, Judge Kelley and Judge Callihan, that that contention is barred by the need for power unit. Nonetheless the staff of the Regulatory Commission

ALDERSON REPORTING COMPANY, INC.

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

RA hlq

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

supports granting an operating license based on an assessment of benefit that we believe to be erroneous and that is what this contention addresses.

> MR. JOHNSON: Did you want any comment from me on that? JUDGE KELLEY: Sure.

MR. JOHNSON: It seems to me that, I could just reiterate, the distinction between the cost to the consumer that are based on fixed capital costs are figured into the rate base and the regulatory direction or the precedent that is recognized in the ruling in the Short Harris case that some costs are not considered at the operating license stage and that is virtually-that is what they are asking be done here and so the fact that you may consider it in your rate base and it is a change, it is still not going to affect that consideration because it is not before you now.

JUDGE KELLEY: I think 8 raises some similar consideration looking at it if you want to add on that, Mr. Riley?

MR. RILEY: Yes, I would, if you please. The Draft Environmental Statement introduces the concept of socio-economic impact and concludes that it is beneficial, so it puts something in the middle of the pans. We are pointing out if you are going to put up that balance, there is something that can be put in the other pan. That is that what it is going to cost the users of the applicant's power in terms of the higher rate they will have to pay for the electricity made available by this plant.

ALDERSON REPORTING COMPANY, INC.

300 7TH STRFET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

JUDGE KELLEY: Okay.

JUDGE CALLIHAN: That is page 5-2. I beg your pardon, 3 5-12, I apologize.

4 MR. RILEY: That is correct, sir. It is Section 5.8
 c on that page.

JUDGE KELLEY: Anything else?

JUDGE FOSTER: I would like to ask the question that Dixon usually asks and that is, is this a restatement of a contention that you submitted earlier?

MR. RILEY: I don't really think it is, Judge Foster, because earlier we didn't know how the staff was going to make its weighing, we didn't know that it was going to conclude that there was a favorable socio-economic benefit. They have made that statement, so concluded, and we challenge that.

15 JUDGE FOSTER: But it has a familiar ring relative to 16 the contentions that you submitted last year.

MR. RILEY: It is in the subject area, sir, but it
is very definitely tied to the evaluation, the judgment made by
the staff in fulfilling its NEPA duties.

20

1

6

7

8

9

10

11

12

13

14

BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

REPORTERS

300 7TH STREET, S.W.

JUDGE FOSTER: Okay.

JUDGE KELLEY: Well, moving on to number 9 concerning spent fuel pool. It appears to be fairly straightforward about the question of what's new in number 9 as opposed to what might have been available information before, notably in the applicant's filing.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

h12 2

MR. RILEY: Well, if we go back CP stages, much of it is new. If we go to the current ER, there is no change here. The matter that is involved again is the evaluation and the evaluation is that routine releases from spent fuel are taken into account, apparently comfortably so and increasing so greatly the amount of fuel at the present, we have greatly increased the source term for several types of potential accident. If it is appropriate, I will go into that, those types of potential accident at this point; if it is not, fine.

JUDGE KELLEY: Well, the sentence where you say, "Since the CP FES both fuel pool accidents relating to handling (to be discussed in the SER, p. 5-19) and pool water loss have become topics of concern." That is all you say about accidents and I don't know what kind of accidents. It seems to me, if you are interested in accidents in this contention, then there is a lack of specificity ir that part of it.

MR. RILEY: Perhaps what we need to do is fuse it with a later contention where we are concerned about the effect of missiles of the fuel pool. One specific hypothetical would be an aircraft coming down on the fuel pool.

JUDGE KELLEY: Well, that comes later, right?

MR. RILEY: It does.

JUDGE KELLEY: Well, okay.

JUDGE CALLIHAN: The penultimate sentence however kind of points out a continuing absence rather than something



6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

new and I am not sure that that quite qualifies in our ground
 rules, if I interpret the penultimate sentence. The sentence
 says to me that it wasn't considered before and it is not considered
 now, is that the intent? It says "They", they being consequences,
 "They appear not to be explicitly considered in the DES".

MR. RILEY: That is correct. I agree with your reading. It would be a pleasant surprise--lets put it this way--if the staff had considered the consequences of several types of fuel pool accidents. The point is that there is an enormous inventory of radionuclides in a fuel pool that has seen something like three years of storage. Now, the plans for this fuel pool are to take McGuire and Oconee fuel pool and take all of the disposition they are able to afford them and accomodate them. That was based on the amendment to the license that was made after the CP stage was completed. What it means is with this enormous source term that if you have a figure of cooling water, you can really be in for some major consequences. These consequences were not grieved about previously nor are they grieved about now. It is perfectly obvious that they are recognized because the West German government authorized a consultants report on the subject. I obtained a translation of this consultant's report from the NRC staff so they certainly have cognizance of this type of accident.

JUDGE KELLEY: Maybe we should just pass to the staff and ask them you didn't discuss fuel pool accidents in the impact statement, draft statement, is that correct, and/or if not, why

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

10

11

12

13

14

15

16

17

23

1

2

not?

MR. JOHNSON: On page E-2 of Appendix E, the position of the staff is stated. In addition, at another point with respect 3 4 to another contention, we referred to a statement -- I am not sure exactly - page 5-19, that the aspects of handling spent fuel from 5 Oconee and McGuire within the fuel-handling facility at 6 Catawba will be discused in the SER and the fuel-handling of Catawba 7 8 generators will also be handled there as well, so that is a subject 9 for the SER.

JUDGE KELLEY: Can I just take you back to E-2, I am looking at it. Where on E-2?

MR. JOHNSON: It is the paragraph before the title "Event V", "Probabilities and release fractions". And the conclusion is, "impacts of these types of accidents are well below the impacts of the reactor accidents presented here", so it was considered to be bounded by what was analyzed, so, for the reasons stated therein.

18 JUDGE KELLEY: And what was analyzed in this section 19 were various types of design base accidents, right, in the plant but no spent fuel accidents, but the conclusion is that whatever 20 happened in the spent fuel pool would be within some bounds of 21 22 probability, would be less severe?

MR. JOHNSON: Yes, sir.

JUDGE KELLEY: I am sorry, and then the other reference 24 25 was E-2 and the second reference was where?

	1	MR. JOHNSON: It is 5-19excuse me5-19, and there is
h15	2	a statement that the fuel handling under the section entitled
	3	"Spent Fuel Storage".

JUDGE KELLEY: While we are with you, Mr. Johnson, any other comments on that?

MR. JOHNSON: No, I would stand on what's in the pleading, we have addressed the normal operation and accidents points.

JUDGE KELLEY: Okay, Mr. McGarry?

4

5

6

7

8

9

10

11

13

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

MR. MCGARRY: The contention is not new, the ER provided adequate information. The intervenors have been aware of this topic area. Indeed they have filed previous spent fuel contentions back in late 1981 and indeed this matter is considered in the 12 DES. The staff has made reference to certain sections on page 33 of our pleading and make reference to other sections. 14

JUDGE CALLIHAN: Picking up Mr. Johnson's remark and 15 maybe being duplicative of Mr. Riley, the staff in its reply of 16 October 4, 1982 at the top of page 17 "The staff has considered 17 a range of limiting severe accidents", now, is that range too 18 narrow or considerations too limited as the thrust of your number 19 9? 20

MR. RILEY: One of our problems would be identifying 21 what they considered it. Now in terms of the West German study 22 to which I alluded, it seems to me it would be very hard to pass 23 that off as not a severe accident. Without identifying specific 24 accidents, it is pretty hard to judge whether they dealt with 25

RA hl6

1

2

3

4

5

6

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

all that you would consider serious enough to be weighed heavily in the DES.

JUDGE CALLIHAN: Well, can we put the shoe on the other foot and ask what do you identify as severe accidents that the staff did not and that is a rhetorical question. I don't expect an answer to it at this moment, but I express my concern.

7 MR. RILEY: Well, I could if you wish, a short answer.
 8 JUDGE CALLIHAN: I think that is a deficiency somewhere
 9 in this argument.

MR. GUILD: We are prepared to address that subject, Dr. Callihan, if that's a trouble to the Board, but we think that's is a deficiency that exists in the staff's analysis and having pointed out that deficiency, that's our burden of specificity and it is an evidentiary matter as to which specific accidents and what their consequences would be and how that alters the cost benefit balance.

JUDGE CALLIHAN: Well, it has been stated before in this connection that your number 9, your ES-9 really doesn't do more than mention accidents and I am trying to figure our how or why the staff is deficient?

MR. RILEY: It would be my basic understanding that the staff has obligations to consider the normal operation situation and accident situation, and, in our opinion, the staff dealt with the accident question by dismissing it, saying we considered several, we don't think it is big enough, severe consequence and we feel

the staff is in error there. We feel there is a deficiency in 1 their study. 2

JUDGE CALLIHAN: Well, until they know how they are 3 deficient, what can we do about it? 4

MR. RILEY: The thing that bothers me, Judge Callihan, is that they should know where they are deficient because they have the materials in hand on the West German study that describes a very serious accident scenario.

JUDGE CALLIHAN: Well, could we look upon this as a 9 criticism of DES and expect more when they come out with their 10 Final Environmental Statement, Mr. Johnson, is that viable? 11

MR. JOHNSON: It is certainly considered as a comment. This is the first time we hear about this Germany accident scenario.

MR. RILEY: I realize that Mr. Johnson is handicapped in this respect and this is certainly not meant in any personal 1 way. Well, perhaps, Judge Callihan, it would be agreeable to the Board for us to formulate a contention after the Final Environmental Statement issues pertaining to whether or not this 18 contention is dealt with, I mean the issue is dealt with in a more adequate way or not.

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

h17

5

6

7

8

12

13

14

15

16

17

19

20

21

22

23

24

25

Ilpw

5

6

7

8

9

10

11

12

13

14

15

16

000 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

JUDGE KELLEY: To the extent there is something new in the Final Environmental Statement, you could make your contention. Are you asking for sort of a -- I'm not entirely clear what we're asking, what we're considering.

JUDGE CALLIHAN: The staff claims in its remarks about intervenors' new contentions or revised contentions or DES contentions, that there has been considered a range of limiting severe accidents, and presumably they've been analyzed. But I understand Mr. Riley's comment is to the effect that -- in Number 9, that -- one statement "The consequences of such mishaps have not been considered." My question to Mr. Riley was, why has the staff not done it and my question to Mr. Johnson was, do you take this as a criticism of the DES, do something about it in the FES. Mr. Riley says maybe yes, but then we'll file a contention after the FES is out, if they haven't done it right. Is that viable?

MR. RILEY: May I inject one item, and that is that
staff has already indicated that the SER is to further consider
the matter of fuel pool which contains fuel from Oconee and McGuire,
making the source even larger. Perhaps it's just premature to
shake the whole tree down.

JUDGE CALLIHAN: That was going to be my words. Can we
hold it in abeyance and see what happens, Mr. Johnson?

24 MR. JOHNSON: Well my position on that is that we have
25 all the information we need and I don't think that anything new is

12pw

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

19

22

going to develop about the source term that can be expected from 1 2 the spent fuel that is coming from -- that may come from other plants. I think we discuss in another contention, in our response, 3 that this also is bounded -- the transhipment impacts are bounded 4 by other factors since some source term is likely to be less. But 5 we still don't have anything to go on. I don't know what the 6 Spearman (ph.) study is, I don't know whether it's a severe 7 accident, a reactor melt down, I don't know whether it's a spent 8 fuel pool; there's nothing here really for us to go on. I just 9 wanted to additionally point out -- I was asked whether the reference 10 in Appendix E-2 was the design-basis accident, it's severe 11 accidents we're talking about here, just to clarify. 12

000518

13 There's no basis here for anything, I think there's some 14 obligation to go forward and say why these accidents that have 15 been analyzed aren't bounded on the spent fuel accident, so that 16 hasn't been done.

JUDGE CALLIHAN: I get the impression the staff hasn't
really anything to address on the basis of criticism.

MR. JOHNSON: Absolutely right.

20 JUDGE CALLIHAN: The criticism is deficient in that it 21 doesn't say what's wrong and what you've got.

MR. JOHNSON: That's right.

JUDGE FOSTER: I'd like to ask Mr. Riley if Contention
Number 16, which I think you alluded to here a little bit ago,
whether 16 encompasses the concerns that you had in Contention 9.



300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

MR. RILEY: It gives one accident mechanism, it doesn't discuss in detail the relationship between that accident and the source term. The source term, of course, is going to be dependent upon how much fuel is in the pool and how fresh it is. But it does cover part of it; namely, a mechanism by which there could be a loss of water in the fuel pool and a loss of providing water.

JUDGE FOSTER: And except for the more specific aspect of a particular kind of an accident, these two are very similar contentions, aren't they?

MR. RILEY: They are indeed. Sixteen is very closely tied in, of course, with the DES, it's tied in with the configuration of the plant, it's tied in with the fact that we're quite near an airport, tied in with the fact that we have morning fogs nuch of the year and there has been a commercial air line crash here within the last ten or so years and many smaller crashes recently.

JUDGE KELLEY: Why don't we just skip up to 16 while
we're talking about it. We talked about 9, I think, pretty
thoroughly. You've already started on 16, go ahead.

JUDGE FOSTER: Well we suggested perhaps they could be fused in some way or other and I'm just wondering -- I'm reluctant to look later on at some sort of a combination, that's why I'm probing here to see if 16 doesn't in fact substantially contain or concern Number 9. Perhaps we would not need to look hard at Number 9 in view of the existence of 16.

I4pw

MR. RILEY: Sixteen is pretty explicit about an external
 hazard being the cause of the accident. Nine is not specific on
 the cause of it, it could be something like a tornado taking out
 the trunk line, the plant becoming inoperative due to an accident
 caused by the loss of power and the inavailability of the cooling
 supply for the fuel pool. And we certainly don't wish to exclude
 that from consideration.

8 JUDGE KELLEY: Mr. Riley, I believe the staff has a NUREG 9 document concerning analysis of airport hazards, it has certain 10 criteria, so many miles for a reactor, those kinds of things. Are 11 you familiar with that?

12

19

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

MR. RILEY: I am not.

JUDGE KELLEY: I elieve -- I'll just ask the staff -- it's my impression that there are some pretty standard guidelines the staff follows, they may be right from the FAA for all I know, and if a reactor site does not meet those criteria it doesn't get any particular analysis. If it does, it gets analyzed. Am I right about that?

MR. JOHNSON: I believe you're right, Your Honor.

JUDGE KELLEY: I'm just wondering whether an analysis of this kind, or a statement that no analysis was needed, is around in the earlier documents. Do the applicants have -- you must have some kind of airport analysis.

24 MR. MCGARRY: Page 47 of our document, we point out that 25 the aircraft hazard was discussed in detail in Section 2.2.3.1.3 of

1 the FSAR.

I5pw

2 JUDGE KELLEY: Is this a site situated such that no 3 special analysis is necessary from the staff's standpoint? 4 MR. MCGARRY: Our analysis was performed consistent 5 with that regulatory guide. 000 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345 6 JUDGE KELLEY: You said there was --7 MR. MCGARRY: Yes. 8 JUDGE KELLEY: Some in-depth analysis of aircraft hazard? 9 MR. MCGARRY: Yes. 10 JUDGE KELLEY: Okay. I'm seeking information. 11 MR. MCGARRY: The answer is yes. 12 Do you want to hear from me further? 13 JUDGE KELLEY: Why don't you go ahead while we're at 14 you and then we'll come back. 15 MR. MCGARRY: Not only is this contention not wholly 16 dependent upon the DES, it's not even dependent upon the DES. 17 We're talking about airplane accidents. Clearly intervenors could 18 have raised this matter a year ago. I just point out the information

19 is in our FSAR, there is nothing new about an airport, the airport 20 has been there for years, there's nothing new about morning fog. 21 Mr. Riley has raised morning fog in his contention in the CP stage 22 of the Catawba proceeding. One other point I do want to reference 23 and that is Mr. Riley said we don't want to exclude from 24 consideration other accidents. We do. When we talk about these 25 contentions, it's a theme that must the more three bout the interest.

contentions, it's a theme that runs throughout the intervenors'

I6pw

3

4

5

6

7

contentions; for example, we think we're here now and we talk 1 2 about specificity and basis, what are the particular accidents that we're talking about. This is not a game that we're giving a for instance, what is your concern, what is the specific accident. And the only accident set forth in Contention 16 is the airplane accident. It isn't a loss of power accident, it's an airplane accident.

8 JUDGE KELLEY: Let me just ask you about this earlier 9 analysis of the aircraft hazard with reference to I gather this 10 would be the Charlotte airport, would you characterize that analysis 11 as one which said well it's close but we'll make it, you know, 12 it's up against the standard but okay, or would you say that it 13 doesn't even come close or no problem here? Because what I'm after 14 is shouldn't the Impact Statement talk about it one way or the 15 other?

16 MR. MCGARRY: 1'm sure it's at the bottom of the scale, 17 but if you can give me one moment --

18

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

(Brief pause.)

19 MR. MCGARRY: Well, let me just answer this, in the DES, 20 and we point this out in our pleading on page 46, the DEC 21 characterizes the concern as negligibly small. They're talking 22 about accident associated with -- the risks associated with 23 transportation accidents, military facilities, explosives, missiles, 24 toxic gas, all those considerations, airplane being one of them, 25 as negigibly small.

w	1	MR. GUILD: Judge Kelley, look at page 5-32, which is
)	2	where Mr. McGarry is quoting from.
	3	JUDGE KELLEY: Okay.
•	4	MR. GUILD: The balance of the paragraph reads, "A more
345	5	detailed discussion "
20024 (202) 554-2345	6	JUDGE KELLEY: No, no, no. I didn't have it open before-
4 (202	7	hand, tell me where.
. 2002	8	MR. GUILD: It's the last paragraph on Section 2, Site
N, D.C.	9	Features.
WASHINGTON,	10	JUDGE KELLEY: Okay, I've found it.
WASH	11	MR. GUILD: I'll just go on to say that the last
	12	sentences promises a more detailed analysis of the subject in the
BUILD	13	SER, but doesn't answer the question of whether or not they
TERS	14	considered adequately the subject of in this particular, Number
REPORTERS BUILDING,	15	16, an airplane crash in the spent fuel pool with the consequences
S.W., 1	16	that flow from that.
LEET,	17	MR. MCGARRY: Judge Kelley, to answer your question,
300 7TH STREET,	18	in the referenced FSAR section we conclude the probability is
300 77	19	ten to the minus seven. That's based on an analysis performed
	20	consistent with the NUREG the Reg. Guide, I believe.
	21	

JUDGE CALLIHAN: Ten to the minus seven per something, per what?

MR. MCGARRY: The sentence says, "Probability of aircraft
 accident at Catawba based on calculation methods of Reference 11."
 And Reference 11 is the standard review plan aircraft hazards,

1 Section 3.5.1.6, November 24, 1975, is approximately ten to the 2 minus seven. JUDGE CALLIHAN: That's one in ten million of something. 3 MR. MCGARRY: That'd be per year. It doesn't say it here 4 5 but it would be per year. 00 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345 JUDGE KELLEY: That would be significant, whether it 6 7 was per year or per hour --8 JUDGE CALLIHAN: Per flight. 9 JUDGE KELLEY: Per reactor-year is a fairly common 10 number that one finds in these analyses. 11 MR. MCGARRY: And throughout this section here they're 12 talking about yearly figures. 13 JUDGE KELLEY: Well you gave us the reference, we'll jusc 14 have to look at it. 15 MR. MCGARRY: Our point is it has been therefor over a year, what's wrong with that analysis, it's never been addressed. 16 17 JUDGE CALLIHAN: While you're there, Mr. McGarry, please, 18 what's the Reg. Guide number? 19 MR. JOHNSON: 0800 is the standard review plan, Section 20 3.5.1.6. 21 JUDGE CALLIHAN: Of what? 22 MR. JOHNSON: Of the standard review plan, NUREG 0800. 23 It's referenced also on page 15 of our brief. 24 JUDGE CALLIHAN: I thought somebody said awhile ago there 25 was a Reg. Guide on it.

ALDERSON REPORTING COMPANY, INC.

ISpw

I9A.W

BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

300 7TH STREET, S.W., REPORTERS

17

23

1

JUDGE FOSTER: Again for reference, that's in your ER, 2 isn't it?

MR. MCGARRY: This is in the FSAR and I referenced one 3 section and it's called aircraft hazard, FSAR Section 2.2.3.1.3 and 4 5 it's on page 2.2-8. There are other references to airplane considerations throughout this Chapter 2 and again there's an 6 7 analysis that's consistent and based upon the standard review plan. 8 MR. GUILD: Judge Kelley, that's a safety analysis done 9 by the applicant and not an environmental cost apraisal done by 10 the agency. And we address the environmental cost appraisal done 11 by the agency. 12 MR. JOHNSON: Just to reiterate, the staff says in its

13 response, page 5-33, that this was analyzed and the hazard was 14 found to be negligibly small.

15 JUDGE KELLEY: Okay, let's see if we can have our tea 16 in ten minutes and come back.

(A short recess was taken.)

18 JUDGE KELLEY: We're back on the record. We had been 19 talking about Contention Number 16 involving the airplane accident 20 and spent fuel pool. I think we've pretty well discussed that, are 21 there other points that counsel didn't get to make that they want 22 to make?

MR. MCGARRY: No, sir.

24 JUDGE KELLEY; Okay, we had skipped from 9 to 16 because 25 they were related. Number 10 is also -- well it's not spent fuel,

I10pw

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

7

9

10

11

12

13

14

1 it's -- it is spent fuel, it's not spent fuel pool. This is a 2 transhipment contention. Where in the DES is this discussion? 3 MR. JOHNSON: It's in Appendix G.

4 JUDGE KELLEY: Let me just ask the staff, the discussion 5 here of impacts, are these Table S-1 numbers -- S-4, are these 6 Taple S-4 numbers?

MR. JOHNSON: Which numbers are you referring to? JUDGE KELLEY: Well, for example, looking at radiological impacts on transportation workers -- okay, this is DOT stuff, general public, three minutes one foot -- where do all those numbers come from?

MR. JOHNSON: It doesn't say there but if you refer back to page 5-18 where -- Section 5.9.3.1.2 --

JUDGE KELLEY: Okay.

15 MR. JOHNSON: -- right there under Transportation of 16 Radioactive Materials, if you read through there it state further 17 on, "The contribution of the environmental effects of such trans-18 portation to the environmental costs of licensing the nuclear 19 power reactor is set forth in Summary Table S-4, reproduced in 20 Table 5.5." It states, "The cumulative dose to the exposed population as summarized in Table S-4 is very small when compared to the annual collective dose of about 60,000 person-rems to this same pupulation or 26,000,000 person-rems to the U.S. population from background radiation."

25

21

22

23

24

JUDGE KELLEY: But is it your understanding that the

Illpw

3

BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

300 7TH STREET, S.W., REPORTERS

1 discussion in Appendix G, at least in part, is also reflective

2 of S-4 numbers?

(Brief pause.)

MR. JOHNSON: From the document itself, there is only
indirect evidence it seems to me. The reference is WASH-1238,
which is the document S-4 is based on.

JUDGE KELLEY: One point I was making is that if you do an analysis in S-4 terms, you're really taking a table number and doing the multiplying but it isn't anything -- a site-specific thing, it's something you get out of a table and you're okay, but it's useful to know where the number does come from.

Is it the staff's legal position that S-4 governs this case? And I mean by this case, the perhaps little bit out of the ordinary situation where you contemplate possible transfers from other reactors to this spent fuel pool?

MR. JOHNSON: Yes, sir. I believe we took this position
with respect to the earlier filed contentions and that position
remains.

19 JUDGE KELLEY: Mr. Riley, did you say the consequences 20 of the accidents are not referred to in quantitative terms. Could 21 you illustrate maybe by example what you would rather see that is 22 not here?

23 MR. RILEY: Well I'd like to see the situation
24 quantitatively defined. For instance, on page G-2, four accidents
25 considered in the accident analysis, (c) is cask overpressurization.

Il2pw

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

1

JUDGE KELLEY: Let us catch up with you, where are you

2 exactly?

3 MR. RILEY: Next to the end paragraph, 3. Accident 4 Analyses and it's two lines from the bottom, (c), cask over-5 pressurization. Now that's a very succinct statement and I assume 6 that the overpressurization is caused by fire and the fire is 7 probably the standard fire that's assumed with setting up the 8 engineering criteria for a cask. If I recall correctly it's 9 1475 degrees Fahrenheit. A number of studies of firest that 10 occur in transportation of various flammable chemicals have found 11 that fires vary considerably in excess of 1475 and if I recall 12 correctly 1800 degrees is sort of an average number, depending on 13 how much you've got, you can get up to 3000. The time of the 14 fire is 30 minutes exposure, this is what is felt overpressurization. 15 If you've been following the newspapers in the last two weeks, 16 there's been a chemical train fire that burned I guess over five 17 days. The accident condition that has been considered I regard as 18 a relatively mild condition as these things go. The consequences 19 therefore are almost certainly going to be under-stated.

I also refer to the fact that casks are not actually tested physically, they're designed to take a 30 foot drop from their most vulnerable position. How does one know what it is without actually trying it out. The velocity in a 30 foot drop is about 30 miles per hour. Well we know that there are a lot of things on our highways that are moving a lot faster than 30 miles

I13pw

1

3

4

5

6

7

8

9

11

13

14

15

16

17

18

19

20

21

24

25

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

per hour and I suspect fuel trucks are included.

2 This is what I mean by a concern with the fact that the accidents are not defined in quantitative terms, there is no basis for assessing how good a choice of accidents was made and how conservative the calculations are.

JUDGE KELLEY: Just a minute. I left my green book back at the hotel, can I borrow one?

MR. MCGARRY: The Regulations?

JUDGE KELLEY: Yes.

10 (Mr. McGarry hands a document to Judge Kelley.) JUDGE KELLEY: I understand the point you just made, I 12 just wanted to look at this table S-4, which sets forth some values for environmental impact in transportation. It's pretty cryptic as far as far as accidents are concerned. It just says radiological effect small, in the footnote, and common radiological causes, one fatal injury in 100 reactor-years, one non-fatal injury in 10 reactor-years, \$475 property damage per vactor-year. That doesn't tell you, in this table itself, even what accidents they were thinking about, let alone the parameters on the accident, whether it's 1400 degrees or 2800 degrees. There's a book underlying this, I want you to understand that.

22 MR. MCGARRY: There's a Regulation underlying it, it's 23 Appendix B to Part 71.

> JUDGE KELLEY: Appendix B to Part 71, okay. MR. MCGARRY: And it says when you analyze a hypothetical

		000530
Il4pw	1	cask accident, you consider a 30 foot drop and a certain thermal
•	2	load and it's right in that Appendix, the thermal load, and it's
	3	like 1400. That's the accident you've got to consider, I don't
•	4	care how that accident happens, that's the load, and these casks
345	5	have all been
20024 (202) 554-2345	6	JUDGE KELLEY: What's the cite again?
4 (202	7	MR. MCGARRY: Appendix B
2002	8	JUDGE KELLEY: Is this in your papers already?
N. D.C	9	MR. MCGARRY: I don't believe so. Appendix B, Part 71 of
BUILDING, WASHINGTON, D.C.	10	those Regulations.
NASHI	11	MR. JOHNSON: Page 546 of that book.
, DNIG	12	MR. GUILD: Judge, that's the basis for cask design
BUILD	13	standards though, that's not a rule setting forth accident
TERS	14	consequences.
REPORTERS	15	JUDGE KELLEY: Okay, I'm on 546.
	16	MR. MCGARRY: Appendix B.
300 TTH STREET, S.W.	17	JUDGE KELLEY: Hypothetical accident conditions, and
HI STH	18	it sets forth drops and speeds and temperatures and so on, for
300 71	19	casks. But how then do you get from that over here to Table S-4?
	20	I assume they're talking about cask accidents, that's the most
	21	obvious and that's the one we think of, but where does it say
•	22	this table with these results is based on a cask accident. Where
	23	does it say that?
•	24	MR. MCGARRY: It clearly has it in WASH-1238, which is
	25	the underlying document to Table S-4.

I15pw

JUDGE KELLEY: That's the study, if you will, that produced these numbers?

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

1

2

MR. MCGARRY: That's right.

JUDGE KELLEY: But the upshot is you've got a rule here and it tells you these two things about accidents and if you put that in your Impact Statement, presumably that's all you need to put in. This is a legal point. Maybe you don't agree with that.

MR. GUILD: No, sir, we don't. We of course find ourselves in the position where you've rejected one argument on an earlier contention, and that was that S-4 was inapplicable and we stated the position it was inapplicable because it sets out the specific circumstances where it would apply and say in all others there will be an independent assessment made. You said there's no distinguishing -- significantly distinguishing features to this transhipment and we just accepted it. Beyond that, we believe that the staff has undertaken expressly to do an accident analysis and weigh the costs of that, and that's what they do at G-2 under 3. Accident Analyses. And having done so and done so we believe inadequately and erroneously, we have attacked that accident analysis that they have done.

JUDGE KELLEY: You're saying they've gone beyond S-4? MR. GUILD: I'm saying they've erroneously evaluated the costs of this facet of plant operation because they have done an erroneous accident analysis which is here and it is beyond S-4. JUDGE CALLIHAN: In which way is it erroneous, in what

Il6pw 1 manner is it erroneous?

WASHINGTON, D.C. 20024 (202) 554-2345

BUILDING,

S.W., REPORTERS

300 7TH STREET,

12

13

MR. GUILD: It's erroneous amongst other reasons that it fails to evaluate cask design or cask construction that does not live up to cask design, or cask subjected to accident conditions as Mr. Riley just related that exceed the conditions assumed to underlie cask design. I just wanted to direct your attention so you'll know --

3 JUDGE KELLEY: Let me stop you before I lose you. You
9 say that their analysis is erroneous because they haven't looked
10 at the construction and it doesn't meet design standards. Now
11 is that in a contention somewhere?

MR. GUILD: Yes.

JUDGE KELLEY: Which one.

MR. GUILD: That's what I was going to point you to, look at Number 19, just because it also is a more detailed statement of a transhipment storage contention, page 11 of our filing.

JUDGE KELLEY; Maybe we can tie that in or move directly
to that when we get through with this.

MR. GUILD: I think we can agree that this is anamplification of what we've been talking about, Number 10.

JUDGE KELLEY: Ten is rather general, nineteen seems to
be, on a quick look, more specific.

JUDGE FOSTER: Since the Impact Statement indicates that the truck shipment has or are going to meet 10 CFR 71 requirements for Type B packaging, are you contending that the 10 CFR 71

Il7pw

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

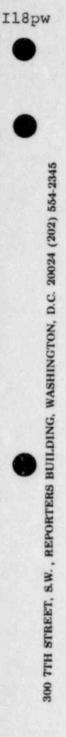
requirements are inadequate for handling this situation?

MR. GUILD: Well sir, our view -- my view is that those standards may not be adequate, but that is not what we seek to litigate here, the adequacy of those standards. Our view is that as part of the NEPA obligation of staff, it must assess the costs of accidents in transhipment. That included in the costs of assessing accidents in transhipments is the low probability but high consequence severe accident that includes an accident in a cask that is not constructed to design standards.

For example, a cask that might have a defective seal ring, O-ring, that allows for it to release contents when subjected to a cask drop or fire that may be equal to or less than design standards. Or a cask meeting design standards but subjected to conditions in excess of those set forth in the design standards. High consequency, low probability accidents but nonetheless an accident that can be evaluated in terms of costs in much the same fashion that the beyond design basis reactor accident can be evaluated and have a cost assigned to it.

19 That cost should be accurately assessed and factored into
20 the cost benefit balance for the license, in this respect, the
21 license to tranship fuel from Oconee-McGuire and store them at
22 Catawba.

JUDGE FOSTER: This sounds very much to me as though you think the requirements are inadequate for the situation. Is that --



19

20

MR. GUILD: Judge, you know, I may think so, my client 1 2 may think so but we're not seeking to litigate the adequacy of 3 the requirements but simply to require the staff to accurately 4 assess the costs attributable to an accident that might occur in 5 the way we've described. Now for example, just to put it in 6 context, we can't at ack the design standards for nuclear reactors 7 but yet the staff in assessing environmental costs has to put a 8 number or a cost assessment on a beyond design basis accident; 9 low probability, high consequence. We would urge that in weighing 10 the costs of authorizing this transhipment of fuels, that cost 11 must be evaluated. Then the next step to that is we say that --12 well, the first step we say is there has been no effort to analyze 13 or weigh the need for the action and I think to paraphrase the 14 staff's responses, well they will analyze the need in their SER, 15 but there is no analysis for need of the action in the Draft 16 Environmental Statement. There's no demonstration that there's a 17 need to subject the environment to the costs associated with 18 accidents or transhipments.

> MR. JOHNSON: May I interject? MR. GUILD: Yes.

MR. JOHNSON: Our position on that was that this is an
environmental impact appraisal and under the regulations 10 CFR
Section 51.7, there is no requirement to address need; however, that
we would in any event address the need and the benefit derived
therefrom in the FES. That was our position.

I19pw

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

11

14

16

17

20

1 MR. GUILD: We of course assert that there is obliga-2 tion at this point to assess the need and therefore the benefit 3 from the transhipment, and then I guess the final leg of the 4 contention is that having not addressed a need, having not addressed 5 adequately the cost, there is the further obligation to assess 6 available alternatives that have a lower environmental cost or that 7 mitigate the costs of the alternative that was analyzed, and those 8 are outlined at the bottom of the contention and we believe technicall 9 available state-of-the-art developments for on-site storage of 10 spent fuel, which should have been assessed to have a lower environmental and economic cost than the alternative of trans-12 shipment and storage of fuels at Catawba.

000535

13 JUDGE FOSTER: Are we still talking about Number 10 here? MR. GUILD: Yes, sir -- oh, I'm sorry, 19. Nineteen is 15 the detailed statement of Number 10, the transhipment and storage. JUDGE FOSTER: I was still back on 10.

MR. GUILD: I'm sorry.

18 JUDGE FOSTER: I gather then, relative to number 10, that 19 what you're really asking for is an evaluation of the cost of an accident which exceeds the current design basis for cask design?

21 MR. GUILD: In short, I'm not certain that the term of 22 art means the same thing as it's used when you're talking about 23 reactor accidents, but I think in short or in substance we're 24 looking to evaluate low probability, high consequence accidents. 25 (Brief pause.)

I20pw

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

JUDGE CALLIHAN: How does this relate to December 1981 filing?

MR. GUILD: We raised storage and transport contentions there, Judge Callihan and --

JUDGE CALLIHAN; What's new here?

MR. GUILD: What's new is that this is specific. These specifica-ly address the DES analysis or lack of DES analysis by the staff. On the environmental portions of the contentions we raised in December, the direction was in short, take a look at the DES when it comes out and revise or recast your contention in light of what the staff says there, and that's what this is. I think if you'll look at the first paragraph of 19, you will find that is either the same language or in essence the same import as one of the earlier contentions, and the remainder of that 19 specifically addresses the DES analysis. It's a revision.

JUDGE CALLIHAN: Well I feel it's separate, the earlier one had such words as "plainly credible, very severe accident". And you imply that the cask won't stand it even though the cask has withstood the Appendix B tests.

> MR. GUILD: Well, sir, the casks themselves -- I'm sorry? JUDGE CALLIHAN: Kind of a vacuum.

MR. GUILD: The casks themselves have not been subjected to the design standards. The design was engineered to meet those standards, but we maintain and would offer evidence at the appropriate time that the casks in fact are used or in service that

I21pw

5

6

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

1 cannot meet those design standards, that cannot be subjected to the 2 30-minute fire or the 30-foot drop or the drop onto the six inch 3 rod. There is a design parameter but there is not a testing 4 requirement for individual casks that are used in transhipments. I mean we can talk about specific casks that are on the road that have been removed from service because they had deficiencies in 7 the construction or their condition.

000537

8 My clients inform me that Duke Power owns one that they 9 don't tranship in but that is used for on-site storage.

10 JUDGE KELLEY: Let me take you back, Mr. Guild, the 11 concept of the need to ship spent fuel from let's say Oconee to 12 Catawba. Are you saying that a demonstration of need -- a 13 discussion of need -- demonstration of need was required in the 14 Impact Statement?

15 MR. GUILD: Yes, sir, we think that's the crux of the 16 matter .. I think the applicants take the position that this is 17 not an intention to do this on their part, it's not a plan to do it, 18 it is an alternative or an option, that sort of conditional 19 language. Yet they're seeking license approval to do it, in this 20 proceeding. Our position is if they don't need to do it, then 21 they don't deserve the authority to do it or they don't deserve 22 the authority because NEPA says don't subject the environment or 23 the public to a cost unless it's for some counter-weighing benefit 24 and we state that as a fundamental premise behind asking you to 25 do something like this you should demonstrate there's a need. The

I22pw

5

6

7

8

9

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

22

25

obligation falls on the agency staff at this point because they 1 have come down in favor of authorizing the actions, but they have 2 3 to assess that need and they haven't done so.

4 JUDGE KELLEY: Let'me play devil's advocate for a minute. What does that really come down to? Suppose they said this outfit has two other reactor sites and the spent fuel pools are filling up or full, so they need to ship over to Catawba where they've got some room. Period. End of analysis. You think it takes more than that?

10 MR. GUILD: We think it takes a good bit more than that, 11 but that's the direction of the proof that I would expect to see 12 coming back from them. For example, where the document referenced 13 the DOE analysis by E. R. Johnson Associates which assesses 14 alternatives for on-site storage, that sets out specific alternative 15 technologies and assesses costs and availability of those alternatives 16 It seems to me that staff has to analyze those in terms of need and 17 in terms of the ability to mitigate the environmental costs of the 18 chosen alternative.

19 JUDGE KELLEY: Do you think it's fair to say that the 20 environmental impacts set forth in Table S-4 are let's say trivial? 21 Would you say that's a fair statement?

MR. GUILD: Small is the term they use, yes, sir.

23 JUDGE KELLEY: Small?

24 MR. GUILD: Yes.

JUDGE KELLEY: Quite small. And the applicant comes in

I23pw

5

6

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

25

and says I want to tranship, they're not going to tranship we can 1 2 assume just for the sheer pleasure of transhipping, they've got 3 some reason for wanting to do it. And they come in and they rely 4 on this table the answer is there's really nothing to this. I'm just trying to get a handle on what's involved in proving need for shipment.

7 MR. GUILD: Well, sir, just to give you -- to try to 8 respond the best I can without essentially, you know, proving their 9 case for them; in South Carolina the Governor's Nuclear Advisory 10 Council, an advisory body of technicians including representatives 11 from at least one utility and the Savannah River Plant, has been 12 performing an analysis just of this sort in part based on data 13 submitted by Duke, which I've seen, which attempts to make an 14 analysis of the spent fuel inventories at various sites, the 15 alternatives available and the use of away-from-reactor storage. 16 As a policy document, the staff of that body is trying to present 17 to the Governor of South Carolina a weighing of alternatives. Do 18 we need to tranship to an away-from-reactor storage facility? Well 19 the data seems to exist and beyond that Congress now seems to be 20 directing some weighing of the necessity for the transhipment to 21 an away-from-reactor storage facility if such is authorized by 22 this current waste legislation now pending. All of those call for 23 the kind of weighing and assessment that we speak to here, and that 24 is some kind of identification that this is a necessary burden to place on the environment and on the community, and that hasn't been

I24pw

1 done at all and we think that is required.

JUDGE KELLEY: I understand, okay, that's all. Mr. McGarry?

00 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-234.

2

3

4

6

7

8

9

10

11

12

13

MR. MCGARRY: It seems to us this contention -- and I'm referring to both 10 and 19 in my remarks -- is an attack on either one of two regulations, an attack on the Part 71, Appendix B Regulation or it's an attack on Table S-4. I've listened to intervenors and they're not happy with the cask and the cask isn't going to comply with the regulations, that's an attack on the regulations pertaining to the cask. If they're satisfied with the cask but then they're saying that the environmental impact associated with the cask accident hasn't been adequately considered, it has, that's Table S-4. You cannot go beyond Table S-4.

14 These are observations I would like to make. Again, I
15 emphasize the point, intervenors make reference to -- this is one
16 example, if there are going to be contentions in this area or any
17 other area, we shouldn't have it by way of example. What are the
18 specific accidents that one is talking about so we can get our
19 arms around this octopus.

Now with respect to the three aspects of Contention 19,
the first one we focused on is need. As far as we're concerned
what is at issue in this particular proceeding is the ability of
Catawba to receive spent fuel from other Duke facilities in the
event Duke determines to ship. But Oconee and McGuire, the two
Duke facilities, already have the authority to ship. That need to

I25pw

REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

12

13

14

15

16

17

18

19

20

21

22

23

24

25

End I.

000 7TH STREET,

ship is a need that is determined in Oconee and is determined in 1 2 McGuire, do they need to ship. That need is implicit in the granting 3 of an operating license and it is envisioned in Table S-4. So we 4 maintain the need issue is not before us and we've discussed this 5 in the pleadings. There are two other aspects of Contention 19, 6 one had to do with the integrity of the cask. I repeat and we set 7 out in our pleadings, that is an attack on the regulations. With 8 respect to alternatives, we maintain that alternatives need not be 9 considered when it is determined that the impact associated with 10 the activity are trivial or small and there is case law to support 11 it, we cite that case law.

One last point. Not only do we want the specific accidents, when we're talking about alternatives, I just notice that they indicate alte: tives such as -- again, if we're going to get into alternatives, and we maintain we shouldn't, what are the alternatives.



S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

300 7TH STREET,

25

MR. GUILD: Judge Kelley, I think Mr. McGarry's obser-1 vation that the need to trans-ship is implicit in Table S-4 high-2 3 lights, you know, one of our problems with S-4 from the beginning as Applicant applied for this situation. S-4 does not explicitly 4 or implicitly assume trans-shipment among reactors for storage 5 6 at another reactor site. It expressly applies only to what was anticipated and required under normal circumstances with the 7 back end of the fuel cycle closed, and that was shipment to a 8 9 reprocessor, shipment for final disposal, and that highlights the fact that this is a unique request that is sought by Duke, this 10 11 intra-system trans-shipment, and where no need has been established at all, it certainly cannot be boot strapped in by saying that S-4 12 assumed that there was a need. 13

JUDGE KELLEY: Let me ask the Staff, in your statements here and in the text and also in the Appendix analysis, where you indicated earlier that at least some of the numbers were derived from S-4, right?

MR. JOHNSON: Well, I didn't say exactly that. I said that both S-4 and the analysis here relies on 1238, that's what I did say, and earlier on, in an earlier section, yes, it did say that S-4 was relied on -- I forget what page that was -- it was Page 5-18 and 5-19.

JUDGE KELLEY: Let me just look at that for a minute.
(Brief pause)

JUDGE KELLEY: Yeah, on 5-18 -- 19 at least, and there

JATJ2

S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

300 7TH STREET,

isn't any discussion of this proposal to ship fuel from Oconee, 1 McGuire and Catawba. There's just some general statements about 2 shipping and the impacts. Now this is something that I have a very 3 imperfect grasp of myself and I'm -- my colleagues I'm sure have 4 a second hand line, but if you look at S-4 it does look like it 5 contemplates -- an isolated reactor with cold fuel coming in one 6 end and hot fuel going cut the other, somewhere at least, to a 7 reprocessing plant I guess it says in the rule. If you're apply-8 ing S-4 to this situation where you are going to -- let's say you 9 have some spent fuel from Oconee sent to Catawba and then later on 10 the same fuel gets sent off to a reprocessing plant or whatever 11 else is designated as the next home for spent fuel, the numbers, are 12 they different? I would guess they would be different. I would 13 guess they would be higher because you would have spent fuel for 14 both ends of the trip as opposed to the numbers that are given for 15 a normal reactor. Am I making any sense? 16

000543

MR. JOHNSON: Do you mean in terms of new fuel coming
in and old fuel going out --

JUDGE KELLEY: Yeah, this is a reactor -- 1,000 M.Wt. reactor and there's certain numbers in S-4 and I'm told that's what I'll get every year, and here in applying those numbers I guess, the spent fuel coming from Oconee let's say to Catawba and then later sent somewhere else, and so there's some kind of spent fuel which puts out more radiation than cold fuel, correct? So do the numbers fit and if they don't, what numbers did you use?

JATJ3

000 7TH STREET,

MR. JOHNSON: I think you know, all of this discussion 1 has not really addressed what in fact the Staff did here in Appendix 2 G ---3

JUDGE KELLEY: Let's get to that. Yeah, go ahead. 4 MR. JOHNSON: I think it becomes quite clear that a very 5 S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345 detailed analysis was done for the Oconee-McGuire context and pub-6 lished in documents referred to in the referencing section, and was 7 relied upon very heavily in this analysis in G-3 -- Appendix G, 8 and there --9

JUDGE KELLEY: Would you just for the record, give us 10 the title of that document? 11

MR. JOHNSON: That document is called Environmental 12 Impact appraisal related to spent fuel storage of Oconee spent fuel 13 at McGuire Nuclear Station, Unit 1 Spent Fuel 4, and the Docket 14 number is 70-2623, December, 1978, and it doesn't take too much 15 to find out that -- in reading this document, that the analysis 16 is taken directly from it, and it relies very heavily on this 17 analysis that was done before I believe -- I believe S-4 was 18 published after this -- no, no -- in any case, it does rely upon 19 this analysis which has, as it stated on Page G-2, an evaluation 20 of very severe accidents, and all of the quantitative doses and 21 that would result from those very severe beyond design base acci-22 dents are included in this document that's referred to. The 23 Commission standard as I referred to earlier on another contention 24 was that the -- it wasn't necessary to have a detailed discussion 25

JATG4

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

of all the quantitative impacts of severe accidents in the environ-1 2 mental impact stage, but only that they be referred to and they are 3 referenced here and one can easily pick up this document and read 4 it. It not only discusses the kind of accident that Mr. Guild is 5 referring to, very severe accidents, and reaches the conclusion 6 that there are negligable impacts, and once you get to that end, 7 what has been done in this Appendix G is to say that this has been 8 The last paragraph before the References on Page G-3. It done. 9 says, "Transportation accidents noted above were previously 10 analyzed for the shipment of spent fuel from Oconee to McGuire. 11 In each case the risk is found to be small. The fuel shipped to 12 McGuire was assumed to have been cooled for 270 days. Because the 13 spent fuel shipped to Catawba will have been cooled at least 5 years. 14 the radiological consequence of accidents during the proposed 15 shipments from Oconee and Mcguire and McGuire to Catawba will be no greater than those calculated in the Environmental Impact App-16 17 raisal in this document here, published in 1978.

18 MR. CALLIHAN: You may have said, Mr. Johnson, but what's 19 the cooling time for the intra-plant shipments?

MR. JOHNSON: 5years. So -- but it is only logical to say that the analysis that was done for the Catawba plant is bounded by the analysis that was done for the Oconee-McGuire shipments and if you look to the conclusion that it was negligably small for the Oconee-McGuire, they found here that it would be no greater than thos calculations, and presumably it would be less.

1

2

3

4

5

6

7

8

9

10

11

12

13

Then once you come to the conclusion that the impact is negligable, I think then the regulations really in a sense end the controversy and the investigation, because if you find that the environmental consequences are negligable you don't have to examine the alternatives to that, and if you determine in the appraisal that you don't have any consequences that are significant you don't have to access the need either.

JUDGE KELLEY: Let me just be sure I'm clear. I thought before -- maybe I'm not listening right, but I had the understanding earlier that the Impact Statement in effect incorporated the S-4 numbers. Now I understand that that is really not it. That the Impact Statement analysis is based really on the 1978 detailed analysis of Oconee-McGuire.

MR. JOHNSON: Let me clarify this a little bit, but I
would just point out that Appendix G is not an Environmental Impact
Statement. It is incorporated into the large document, but it is
a separate Regulatory finding. It's entitled Environmental Impact
and Appraisal for trans-shipment of spent fuel from Oconee and
McGuire to Catawba Nuclear Stations, and it's judged under the
standards for Environmental Impact Appraisals.

21 JUDGE KELLEY: I understand what you're saying. Go 22 ahead.

MR. JOHNSON: Well, that is premise for some of my earlier
statements concerning Regulatory requirements of assessing need.
Now if you refer to the Oconee-McGuire Appeal Board Decision, which

JATG6

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

6

7

9

10

11

12

13

14

is on Page 23 of our response, it's well settled that neither 1 Section 1022 (c) or Section 1022 (e) of NEPA obligates the Federal 2 Agency to search out possible alternatives to a course which itself 3 will not either harm the environment or -- a social matter in which 4 the country's resources are being expended. 5

000547

JUDGE KELLEY: Okay, but I just wanted to nail down what I think is a fairly simple point and that is I thought that your 8 analysis was an S-4 analysis of these transportation impacts, environmental impacts, of transportation of spent fuel. Now I understand that they're not. They're really based on this 1978 analysis that was done of Oconee-McGuire, and that's a much more elaborate site specific if you will, analysis than that Table does and -- but that's right isn't it, you base this on the more elaborate analysis?

15 MR. JOHNSON: I believe that that's correct, because if you look at the references in G-3 which is no reference to Table 16 S-4, there's no reference to Table S-4 in the text, so that it 17 seems to have gone beyond what is stated in S-4. On the other 18 hand, I was only addressing the analysis of severe accidents, which 19 I think was the subject of that contention, and that definitely 20 is based on some other environmental Impact Statements. 21

22 JUDGE KELLEY: This is pure legalistic discussion --23 would you say that the Staff in writing the Impact Statement here could have used S-4 but has discretion to rely on this more elaborate 24 analysis? You see, if you come in and you say, here's S-4, and here 25

JATG7

20024 (202) 554-2345

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C.

13

are these numbers and that's that. Then you could also say to Mr.
Riley, Mr. Guild, that's a rule, and you can't attack rules but on
the other hand, you're not doing that, and you're saying here is
this elaborate analysis and I would think that that's fair game
for them if they want to review it,

Well, my question may have gotten lost. Can you just
say, well, I'm not going to use S-4 this time. We're going to do
something a little more indepth and we'll go ahead and slug it
out with whoever wants to question the analysis.

MR. JOHNSON: Well, it seems to me that that's been done, although it would seem to me that S-4 -- relying on S-4 exclusively is within the Regulations.

JUDGE KELLEY: But you didn't do it?

MR. JOHNSON: Well, we didn't rely expressly on these numbers. I do not -- there's no evidence from the document as I read it that S-4 was used in these calculations, unless these numbers in the Environmental Impact appraisal for Oconee-McGuire were based on the S-4 numbers, because it's these numbers that are relied upon.

JUDGE KELLEY: Well, I think the Board is entitled to know whether these are S-4 numbers or not, and based on what we've heard this afternoon, I think that we would assume that they're not and that this is a particularized analysis based on the facts pertaining at least in this area, and we would treat them as such. MR. JOHNSON: I think that's correct, Your Honor, but I

JATG8

would like to check back with the Staff that analysed --

2 JUDGE KELLEY: We'd like to know for sure, you know, whether these numbers are fully consistent with S-4, or whether 3 they're peculiar to this site.

5

6

7

8

9

11

13

14

15

16

17

18

23

24

25

000 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

4

1

MR. JOHNSON: I will check.

And these times. JUDGE KELLEY:

MR. GUILD: Let me offer something else here. From the document referred to by the Staff, Environmental Impact Appraisal in the Oconee-McGuire document, Introductory Page 5 it states and I quote, "although not bound by values in Table S-4 this action 10 resulted in values less than those given", which is the completion of the accident analysis and the Environmental Impact Analysis 12 done in this document, but even at that time, the Staff was not relying on S-4 as settling the matter and seemed to recognize that they had to do an independent Environmental Cost Appraisal at that time, and we maintain that no less and probably more ought to apply here, where we're talking about not just from one plant to another, but from two plants to another.

19 JUDGE KELLEY: Well, then you're saying yes, you need an individualized study and we'd have to look at your contentions, but 20 21 the general point is that this is not a particularized, individual-22 ized enough to set forth the relevant consideration.

MR. GUILD: That's correct -- that's correct. MR. MCGARRY: Our feeling is S-4 controls. JUDGE KELLEY: Excuse mc?

JATG9

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

11

1

2

3

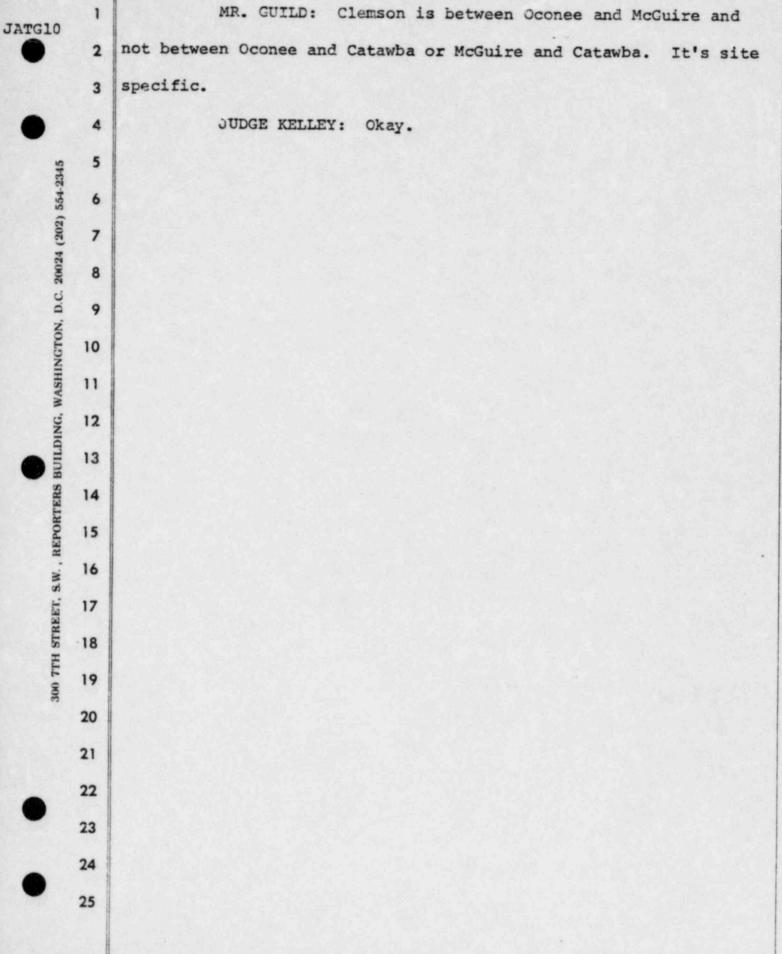
MR. MCGARRY: Our point is Table S-4 controls and you don't need Appendix G.

JUDGE KELLEY: I understand.

4 MR. RILEY: Judge Kelley, the answer of course depends 5 upon the assumptions that go into it, and quoting the same document that the Staff was referring to on Page 35, the consequences 6 7 of extra severe colision, or overcurn accident are discussed, 8 and there's a probability given, but the dose of course for giving 9 release depends on where people are in relationship to the dose. I'd like to simply read the concrete assumption that was made to 10 that specidic situation.

12 "Doses due to the extra severe colision or arbitrary 13 accident were calculated for the same population gloups which were discussed in Section 6.1.3." That was a groupof students on the 14 campus of Clemson University. The first year total body dose to 15 any one student standing 400 meters from the accident would be 16 4 milligrams or 4 percent of natural background, and that's great, 17 18 but most people are standing closer than 400 meters.

19 So I'm pointing out that the thing is very specifically 20 dependent upon the assumptions you make in the analysis, and given 21 this problem, I'm sure any competent person would come out making it smell like a rose or looking like the -- looking like it's 22 23 hell. This flexibility, this choice that's available to the 24 person making the calculations that we're challenging. We're saying that it's treated too much -- Your love. 25





REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

25

300 7TH STREET, S.W.,

JUDGE KELLEY: Mr. Johnson, can you--the document you referenced in the 1978 one, could the staff have some -- not now, but when you get back home, can you serve copies of that?

MR. JOHNSON: To who?

JUDGE KELLEY: Serve it to us I quess, maybe not everybody. You have got a copy, don't you?

MR. GUILD: I would like one.

JUDG, KELLEY: One to Mr. Guild and one to us. The applicants may need one.

MR. JOHNSON: I don't want to repeat this overly, but if you refer back to page 5-18, the statement does say that, "The contribution of the environmental effects of such transportation to the environmental costs of licensing the nuclear power reactor is set forth in Summary Table S-4". It may be, and I will check this out, that the site specific aspects of exposure and so on may have relied on S-4 in addition to the analysis that was --

JUDGE KELLEY: Okay. Maybe just a little letter to us when you get around to it.

MR. JOHNSON: Sure.

JUDGE KELLEY: Well, actually if you can do it in the next week or so.

MR. JOHNSON: Yes.

JUDGE KELLEY: Well, why don't we do one more and that 24 will carry us up to 5:30 or so? Number 11 talks about the relationship to McGuire. Lets take a minute to read that over

	1	again.
¢2	2	(Brief pause.)
	3	Is this you, Mr. Riley?
	4	MR. RILEY: Yes, sir.
S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345	5	JUDGE KELLEY: Does this speak to the question of the
	6	DES that talks about severe accident analysis, is that what we
	7	are talking about?
20024	8	MR. RILEY: Yes, that certainly does.
V, D.C.	9	JUDGE KELLEY: Okay.
NGTON	10	JUDGE CALLIHAN: Do you have a reference?
VASHI	11	MR. RILEY: That is table 5.1.0 and page 5-45.
ING, V	12	JUDGE KELLEY: Maybe you could just paraphrase, in simple
BUILD	13	terms if you can, the contention as a way of getting it started.
TERS	14	MR. RILEY: The Board seems to have had a problem with
REPOR	15	respect to what we are trying to communicate earlier and we feel
S.W. , 1	16	that the totality of this is the appropriate concept to use con-
	17	sidering the operating license for this plant, and I think the
300 7TH STREET	18	Board's language suggested and so did the pleading by the staff
300 71	19	that we were talking about an event in which simultaneously at
	20	McGuire and at Catawba an accident happened, and the joint impact
	21	on individuals of these two simultaneous accidents; that isn't
	22	what we were talking about. Individuals live through time. They
	23	are exposed to a number of risks. Some risk is eventually going
	24	to terminate the life of the individual, and I am saying that
	2-	the person is living through the period of operation, assume,

for these two nuclear plants is exposed to the risk of both of them, cumulatively; not necessarily simultaneously. Am I making that point reasonably clear?

000554

Well, this business of summing up risks is as far as 4 I know something that previously has not been staff practice and 5 for me it appeared that the staff broke new ground in recognizing 6 the validity of this summation concept and I refer you to page 7 5-45, the second paragraph, first sentence. In relevant part, 8 it reads, "If the probability of sustaining a total loss of the 9 original facility is taken as the sum of the occurrences of a 10 core-melt accident (the sume of the probabilities for the categories 11 in Table 5.10) then -- " etc., and I think is a reasonable approach 12 and really the only valid approach to be taken, so I feel that 13 it is an improper and inadequate analysis if we look at the proba-14 bility of accident A, well that's low; then accident B, oh, well, 15 16 that's low, and so forth, and we don't sum up the entire population probabilities that is generated coincident with the operation 17 of the plant. Totality of risks. 18

19 JUDGE CALLIHAN: Are you addressing the manner of combining 20 separate probabilities?

21

24

25

1

2

3

20024 (202) 554-2345

D.C.

REPORTERS BUILDING, WASHINGTON,

300 7TH STREET, S.W.

MR. RILEY: Yes, sir.

JUDGE CALLIHAN: The probability of something happening here and the probability of something happening here?

MR. RILEY: Right.

JUDGE CALLIHAN: And you are addressing the way in

k4	1	which those two probabilities are combined?
	2	MR. RILEY: Well, more than two, sir.
	3	JUDGE CALLIHAN: Yes.
)	4	MR. RILEY: Exactly.
20024 (202) 554-2345	5	JUDGE FOSTER: You are making reference here that
	6	Table 5.10
(202)	7	MR. RILEY: Yes, sir.
20024	8	JUDGE FOSTER: I am having difficulty matching the
V, D.C.	9	Table on page 5-79 with
WASHINGTON,	10	MR. RILEY: No, sir, all right, 5.10, comes on page
VASHI	11	5-79.
ING, V	12	JUDGE FOSTER: Is that the table you are referring to?
REPORTERS BUILDING,	13	MR. RILEY: Yes, sir. The probability column is the
TERS	14	second column, starting with the Event V two times ten minus six.
REPOR	15	Both probabilities have
.W. ,	16	JUDGE FOSTER: Your text talks about the probability
EET, S	17	for ten categories.
300 7TH STREET,	18	MR. RILEY: Right.
300 7T	19	JUDGE FOSTER: What are the ten categories?
	20	MR. RILEY: I pass on that one and defer to the staff.
	21	MR. JOHNSON: I only see five.
	22	(Brief pause.)
	23	JUDGE KELLEY: Is that a quote? Is that a quote in
	24	your contention? It says, "ten categories".
	25	MR. RILEY: There is a typographical error there.
	1.1	

My writing is not that legible. It should read, "for the 1 categories in Table 5.10", my apologies. 2

JUDGE KELLEY: And on what page are you looking? MR. RILEY: I am looking at page 7 of our contention, and that is on Contention 11, it is the second line from the bottom.

~~~~~

JUDGE CALLIHAN: And would you give us the correction again, please, I am sorry.

MR. RILEY: I beg your pardon?

JUDGE CALLIHAN: Give us the correction again, please. MR. RILEY: For the word "ten", substitute "the". JUDGE CALLIHAN: Thank you.

JUDGE KELLEY: Let me ask about the text of 11, the 12 first sentence, general sentence, about taking McGuire into account, 13 the second sentence also references McGuire, and then the rest 14 of the contention seems to be a compliment to the DES because 15 you seem to say, well, you have done it right here and then you 16 quote that section that you quoted just a minute ago, so the 17 contention of course is never a compliment but in these last six lines seems to be your accolade to the DES so I am not sure what you are saying is wrong with the DES.

MR. RILEY: I am saying the DES is right in this 21 respect and if I may put it so boldly, the Board found that we 22 were wrong when we introduced the totality of risk concept in 23 our December, 1981 contention, so I am saying this buttresses 24 our approach. 25

ALDERSON REPORTING COMPANY, INC.

D.C. 20024 (202) 554-2345 300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON,

k5

3

4

5

6

7

8

9

10

11

18

19

20

JUDGE KELLEY: I appreciate that. Now lets get it as clear and as candid as we can. We are not offended, we can certainly make corrections here, but I am not sure where I am--I mean if this is a contention--if you are saying that the DES is fine and that is really what is before the house, then how are we to deal with this? I thought it was looking for problems in the DES from your standpoint.

000557

MR. RILEY: Judge, I think that I was too oblique in the way I put that. What I really wanted to say is we were turned down on our totality of risk contention.

JUDGE KELLEY: Right.

k6

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

8

9

10

11

12

13

14

15

16

17

18

24

25

MR. RILEY: We shouldn't have been. The DES is showing us here that it works the same way that I suggested that we should work, namely on the totality of risk basis.

JUDGE KELLEY: Uh-huh.

MR. RILEY: And the contention here, the invisible contention is that our earlier contention should have been admitted.

JUDGE KELLEY: I see, so, but what do we do now?
 MR. RILEY: Admit our earlier contention if you will,
 please.

JUDGE CALLIHAN: What is--give us the designation of
your earlier contention.

MR RILEY: Yes, sir.

JUDGE CALLIHAN: Number something?



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: But again, contentions are levelled at staff documents, applicant documents. You have got nothing to level this against. I mean what you are saying is the Board made a mistake and maybe we did, but you are still in the position of litigating deficiencies in staff and applicants papers, right and if there isn't any deficiency in the staff's Draft Impact Statement, what are we litigating about? MR. RILEY: Perhaps it is a motion for reconsideration

more properly put.

To respond to Judge Callihand if I may, it is contention number 3 in the CESG filing of December 9, 1981.

JUDGE CALLIHAN: Thank you.

JUDGE KELLEY: Well, we can go back to the old contention and read it in light of this discussion.

Can you tell me what that contention, the old contention, what did it reference?

MR. RILEY: I beg your pardon?

JUDGE KELLEY: The old contention that we turned you down on, what did it refer to?

MR. RILEY: It contended that the staff evaluation on risks was inadequate. That of course assumed that the DES would be inadequate in this respect. The DES we now feel is inadequate in this respect.

JUDGE KELLEY: Is inadequate?

MR. RILEY: Yes.

JUDGE KELLEY: Or is adequate?

MR. RILEY: It is inadequate despite their embracing the concept, we feel the practice that they are embracing is in error.

We like to think that they have taken one step but we think that there is another step that should be taken.

JUDGE KELLEY: And that step is?

MR. RILEY: That step is a more realistic assessment of the probabilities where you see, in our judgment, one major accident actually per 133 operating years rather than you know one hypothetical, two chances and ten to the minus six and another three and ten to the minus fifth and that sort of thing, magnitudes of weight. We like their summary probabilities but we think their probabilities are wrong.

JUDGE KELLEY: I guess I am still not sure what--you know, when you look now on a piece of paper with 60 words, what are we supposed to rule on? Is it in or out?

MR. GUILD: Judge, I guess the original contention is
 a NEPA contention.

20

23

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

**k**8

D.C. 20024 (202) 554-2345

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON,

JUDGE KELLEY: Okay.

21 MR. GUILD: It says the staff failed to give adequate
 22 weight to the totality of risk of an accident.

JUDGE KELLEY: Okay.

MR. GUILD: The cost attributed to that, and the McGuire
 contribution to that element of risk is what Mr. Riley had reference

to. It is the McGuire piece that is missing from the staff's .
 analysis when he targeted that in December and that McGuire piece
 is still missing.

JUDGE KELLEY: McGuire is still missing. MR. GUILD: In short, yes, sir.

JUDGE KELLEY: I think I understand and then. 11 as written pretty much says that and I think we can rule on it.

8 Let me ask the staff whether they agree that the McGuire 9 piece, if you will, is missing?

MR. JOHNSON: Is what?

4

5

6

7

10

11

00 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

JUDGE KELLEY: Missing.

MR. JOHNSON: No, it is our position it is not missing. 12 It is not necessary. I can try to review what was offered originally 13 and what is offered today and what the staff document says. 14 The staff document sums the probabilities, core-melt scenarios. It 15 seems to me that is guite a different thing from either the 16 new contentic or the old contention. The old contention was 17 a totality of risk where that was rejected based on lack of speci-18 19 ficity as to what the concept was and what its bases were, but it seems to me that if you look at that original contention, 20 it has not summary possibilities as the core-melt of the accident 21 scenarios and it was costs of risks associated with decommissioning 22 transport, inter and long-term storage, radioactive substances, 23 24 etc. Our position is that you are basically evaluating the 25 risks at Catawba and you look at Catawba and we did not understand



300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

the contention the way it has been presented here in this proceeding. We thought that it was talking about the risk of simultaneous accidents and we addressed that. It wasn't clear.

Now I understand that we are talking about assessing lifetime risk and I am not aware that that is a concept that the staff follows that applies in accident evaluation. I would have to look at that.

JUDGE KELLEY: You say you don't follow that?

MR. JOHNSON: I am not aware that the staff does do that and so am not prepared to address it.

JUDGE KELLEY: If I am a resident a couple of miles away from a nuclear power site, and there is a debate whether they should have one unit or four units, am I at greater risk with four units than I am with one?

To me that is sort of obvious, I assume I am.

If in range of McGuire and Catawba, is there greater risk than presumably one site? Just a very general term, that still meant that I am at greater risk.

MR. JOHNSON: My understanding was that the scope of review is the risks that are generated by Catawba and that one wouldn't look to, for example, the risks associated with automobile accidents or chemical spills when evaluating the risks generated as a result of the operation of Catawba and similarly you wouldn't assess the risks for the operation of Catawba in terms of what might or might not happen in terms of risks at McGuire.

Rinkl1

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

JUDGE KELLEY: Well, but if you told somebody in the McGuire proceeding that the chances of their being close to a core melt were ten to the minus six and then two years later you had a Catawba case, somebody who lived exactly in between the two, would you just ignore the fact that they were already--they were an equal distance away from an already operating reactor? Isn't that relevant?

> I assume it increases the risk. That sounds reasonable. MR. JOHNSON: That sounds reasonable.

JUDGE KELLEY: Okay. But that is not the approach that you take here, that the staff physically takes -- you look at the reactor and prepare the risks.

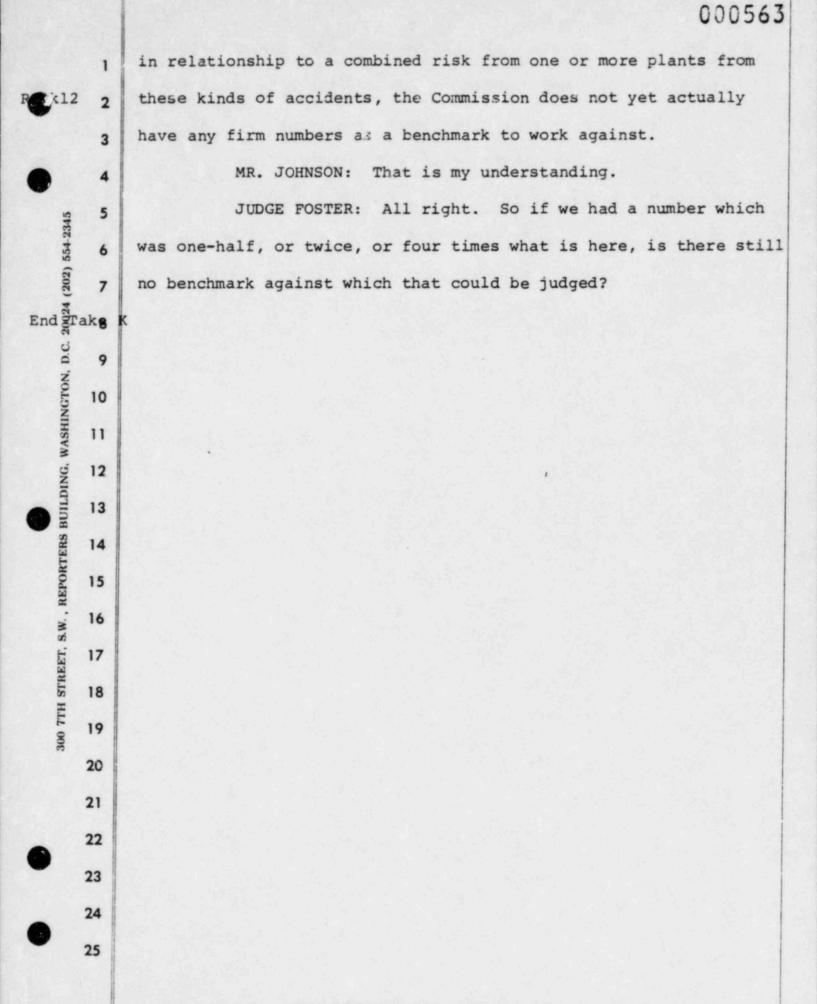
MR. JOHNSON: I believe from my review of the DES, that was the approach that was taken. Now I would like to have a chance to ask the staff about it again.

JUDGE KELLEY: Okay.

JUDGE FOSTER: The Commission has not yet adopted a safety goal in quantitative terms--I will address this to Mr. Johnson--to my knowledge, the staff and the Commission has not yet adopted a safety goal which would put an actual quantitative limit on the probability which would be acceptable or unacceptable, is that correct?

MR. JOHNSON: It is my understanding it has been published for comment. 25

JUDGE FOSTER: This is, what I am getting at here is



Llpw

MR. JOHNSON: When I stated that we were relying on our position, when you look at Catawba, I was relying on the NEPA -the environmental provisions in Part 51 which talks about the proposed action. It says you look at the environmental consequences of the proposed action.

JUDGE FOSTER: So a way that this risk could be looked at
at this time would be confined to a NEPA type cost perhaps?
MR. JOHNSON: That's the context.

9

JUDGE FOSTER: Thank you.

JUDGE KELLEY: That may be, but in a NEPA analysis -- I assume it is true, but in a NEPA analysis about impacts, we're talking about reactor safety. If you already have a reactor ten miles down the road I assume you could say something about that, it's there, it's part of the landscape I would think.

15

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

Mr. McGarry?

16 MR. MCGARRY: Several observations. First of all, in 17 talking about this additional risk, this additional cost, I maintain if one is going to focus on additional risk or additional cost, 18 19 then it's appropriate for one to also focus on the additional 20 benefit because that individual who may be located midway between 21 Catawba and McGuire is going to get that benefit, and based on the 22 existing cost benefit, balance has been struck in McGuire and 23 already proved and the instant cost benefit balance has been struck 24 in this case. The answer is simple, it's a tradeoff.

25

What I'd really like to inquire into is the status. Where



BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

300 7TH STREET, S.W., REPORTERS

15

16

17

18

19

20

21

22

23

24

25

1 are we? We have an old contention, we have a new contention and 2 we have what we will characterize as an invisible contention. We'd 3 like to just get things straight. With respect to the old conten-4 tion, that was dismissed by the Board. The intervenors are now 5 making a motion for reconsideration and the basis for their motion 6 for reconsideration as I understand, but let me ask them, that's 7 what I suspect they're doing -- the basis for that motion for 8 reconsideration is the staff has utilized a methodology they 9 attempted to convey to the Board in the first instance and they 10 didn't convey. Well, -- so we get things clear, let's just make 11 sure the first contention -- the first action of the Board remains 12 in effect. That contention is not before the Board, it's incumbent 13 upon the intervenors to take appropriate action to bring it 14 before the Board.

With respect to the instant contention, that contention has absolutely no bearing to the DES. Intervenors as much as admitted that. So if you are looking at this new contention in terms of DES, which is exactly what we're looking at, then that contention must be denied. Now if there is a new, the invisible contention, if there is going to be a contention, let's have that filed in an appropriate fashion so we can come to grips with it.

The important thing, and the reason I stress this, is that we go back and look at the initial contention. There is absolutely no reference made in McGuire whatsoever and yet the intervenors did go to some length to talk about transport and

L3pw

storage and decommissioning and now for the first time we hear about 1 2 McGuire.

3 So I'm just stressing from the applicant's point of view for consistency and an orderly process, I think we ought to deny 4 the contention that's before the Board inasmuch as it is not based 5 6 upon the DES, and leave it to intervenors to take whatever appropriate steps to bring the contention to the Board's attention 7 8 and we'll have an opportunity to respond to it.

9 JUDGE KELLEY: I thought their position was absent DES, I thought they were saying DES was deficient. They show some signs of promise because they're beginning to understand the concept but they don't have McGuire in for example in their analysis; therefore, there's a gap.

14 MR. MCGARRY: I don't disagree with that, but the test 15 here is wholly dependent, and the answer is absolutely no because 16 they filed the first contention and what they're telling you is you misunderstood their first contention and what they meant to say in their first contention is what they're saying now. So the DES in no way serves as either dependent or wholly dependent basis for the contention.

21 JUDGE KELLEY: That's a separate point. Why don't we 22 adjourn, it's 20 of six and just to repeat -- oh, it's not 23 available at 8:30; 9:00 then is the starting time at the library. 24 Does everybody have the address of that place? I stated it 25 earlier, I'll do it once more. Auditorium, Public Library of

## ALDERSON REPORTING COMPANY, INC.

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

10

11

12

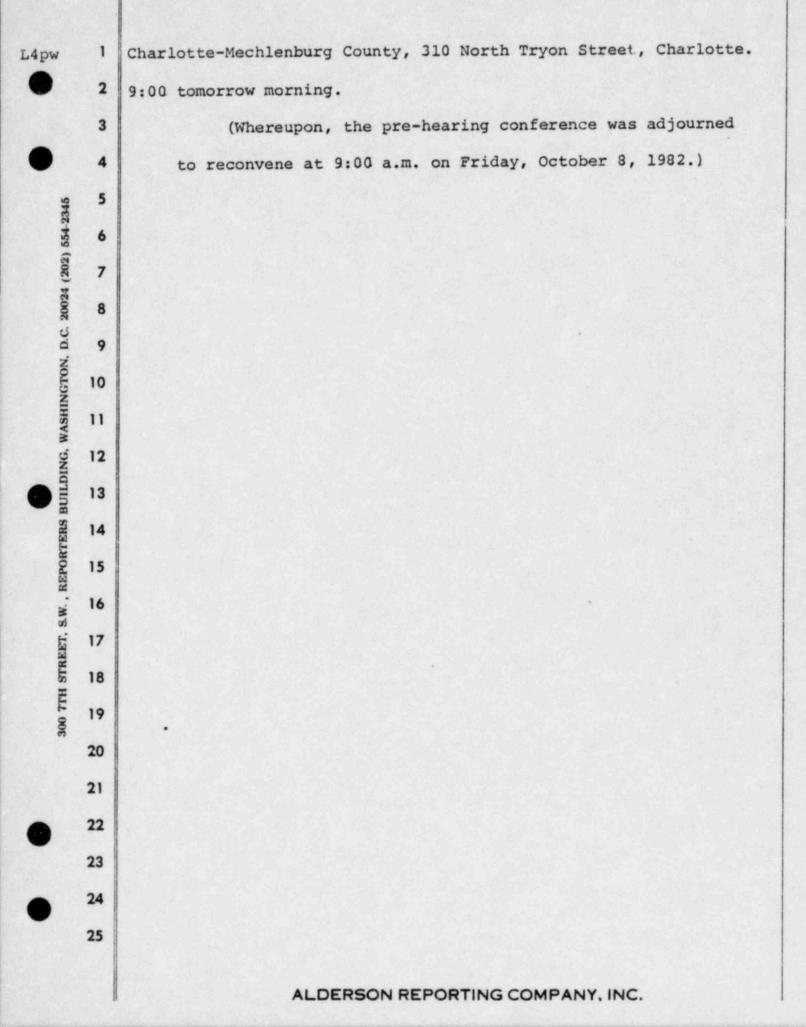
13

17

18

19

20



#### NUCLEAR REGULATORY COMMISSION

This is to certify that the attached proceedings before the

Atomic Safety & Licensing Board

in the matter of:

Date of Proceeding: \_\_\_\_\_October 7, 1982

Docket Number: 50-413 & 50-414

Place of Proceeding: Charlotte, N. C.

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

Peggy J. Warren

Official Reporter (Typed)

Official Reporter (Signature)