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RAS 7998

# Official Transcript of Proceedings

## NUCLEAR REGULATORY COMMISSION

Title: Early Site Permits  
Pre-Hearing Conference

Docket Number: 52-007-ESP et al.

Location: Rockville, Maryland

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

+ + + + +

BEFORE ADMINISTRATIVE JUDGES:

G. PAUL BOLLWERK, III, CHAIRMAN  
 DR. PAUL B. ABRAMSON  
 DR. ANTHONY J. BARATTA

+ + + + +

	)	
In the Matter of:	)	Docket No. 52-007-
	)	ESP
EXELON GENERATION COMPANY, LLC	)	
(Early Site Permit for Clinton	)	ASLBP No. 04-821-
ESP Site)	)	01-ESP
	)	

	)	
In the Matter of:	)	Docket No. 52-008-
	)	ESP
DOMINION NUCLEAR NORTH ANNA, LLC	)	
(Early Site Permit for North	)	ASLBP No. 04-822-
Anna ESP Site)	)	02-ESP
	)	

	)	
In the Matter of:	)	Docket No. 52-009-
	)	ESP
SYSTEM ENERGY RESOURCES, INC.	)	
(Early Site Permit for Grand	)	ASLBP No. 04-823-
Gulf ESP Site)	)	03-ESP
	)	

Monday,  
 June 21, 2004

The Initial Prehearing Conference in the above-entitled matters convened at 9:30 a.m., in the Auditorium of Two White Flint North, 11555 Rockville Pike, Rockville, Maryland.

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## P-R-O-C-E-E-D-I-N-G-S

(9:30 a.m.)

CHAIRMAN BOLLWERK: Good morning. Today we're here to conduct an initial prehearing conference in three early site permit or ESP proceedings under 10 CFR Part 52.

In response to three notices of opportunity for a hearing published in the Federal Register, various separate but overlapping sets of petitioners have requested an adjudicatory hearing on the respective applications of Dominion Nuclear North Anna, LLC, Exelon Generation Company, LLC, and System Energy Resources, Incorporated, for early site permits for additional power reactors at the existing sites of the North Anna, Clinton, and Grand Gulf nuclear facilities.

Relative to the North Anna site in Virginia and the Clinton site in Illinois, the Blue Ridge Environmental Defense League, the Nuclear Information and Resource Service, and Public Citizen have all sought to intervene, and, in the case of Clinton, have been joined by the Environmental Law and Policy Center and the Nuclear Information -- excuse me, the Nuclear Energy Information Service.

Relative to the Grand Gulf site in

1 Mississippi, the Nuclear Information and Resource  
2 Service and Public Citizen are joined by the National  
3 Association for the Advancement of Colored People,  
4 Claiborne County, Mississippi Branch, and the  
5 Mississippi Chapter of the Sierra Club.

6 In a March 3, 2004, memorandum and order,  
7 CLI-04-08, in response to motions filed by each of the  
8 applicants, the Nuclear Regulatory Commission  
9 determined that each of the ESP proceedings should be  
10 conducted in accordance with the newly-revised 10 Code  
11 of Federal Regulations Part 2 provisions governing  
12 hearing procedures, and referred the hearing request  
13 of the three sets of petitioners to the Atomic Safety  
14 and Licensing Board Panel for the appointment of  
15 licensing boards.

16 On March 8, 2004, the Licensing Board  
17 Panel's Chief Administrative Judge issued an initial  
18 prehearing order for each of these proceedings  
19 establishing certain procedures and schedules relative  
20 to the filing of hearing request supplements regarding  
21 the Petitioners' legal standing and their contentions  
22 or issue statements, in addition to other  
23 administrative matters.

24 Subsequently, on March 22nd, the Chief  
25 Administrative Judge issued notices designating a

1 three-member Licensing Board for each of the three ESP  
2 proceedings. In each instance, the membership of the  
3 Licensing Board was the same.

4 Additionally, on that date, a Licensing  
5 Board order was issued for each of the proceedings  
6 indicating that because the ESP cases involve a common  
7 first-of-a-kind subject matter, a Part 52 application  
8 for an early site permit. To ensure consistency in  
9 connection with rulings on the important initial  
10 determinations regarding standing and contentions  
11 admissibility, the cases will be considered together  
12 during a single initial prehearing conference.

13 In convening that prehearing conference  
14 today, we are here to provide these participants with  
15 an opportunity to make oral presentations on the  
16 contested matters that are now before the Licensing  
17 Board as a result of their various filings over the  
18 past several months. Up to this point, the legal  
19 standing of the various Petitioners has not been  
20 contested. As a consequence, the focus of this  
21 prehearing conference will be the admissibility of the  
22 contentions proffered by the various petitioners.

23 Before we begin hearing the participants'  
24 presentations on these matters, I'd like to introduce  
25 the Board members. To my right is Dr. Paul Abramson.

1 Dr. Abramson is both an attorney and a nuclear  
2 engineer and a full-time member of the Atomic Safety  
3 and Licensing Board Panel. To my left is Dr. Anthony  
4 Baratta. Judge Baratta is a physicist and a full-time  
5 member of the Panel.

6 My name is Paul Bollwerk. I'm an attorney  
7 and the Chairman of the Licensing Board.

8 At this point, I'd like to have counsel  
9 for the various participants identify themselves for  
10 the record. Why don't we start with counsel for the  
11 various Petitioners, then move to counsel for the  
12 Applicants, and finally the NRC Staff counsel.

13 Ms. Curran?

14 MS. CURRAN: Good morning.

15 CHAIRMAN BOLLWERK: Good morning.

16 MS. CURRAN: I'm Diane Curran. I'm  
17 representing most of the Petitioners in this case, and  
18 I would like to introduce some of the people who are  
19 with me today, some of whom are on the pleadings, in  
20 the Clinton case in particular.

21 Behind me is Paul Gunter of Nuclear  
22 Information and Resource Service; Michelle Boyd of  
23 Public Citizen; and Janet and Lou Zeller with the Blue  
24 Ridge Environmental Defense League, BREDL.

25 Tomorrow we will be joined by some

1 representatives of the NAACP who are driving up from  
2 Mississippi today.

3 CHAIRMAN BOLLWERK: All right.

4 MR. FISK: And I'm Shannon Fisk from the  
5 Environmental Law and Policy Center, and I will be  
6 discussing two of the contentions regarding the  
7 Clinton ESP.

8 CHAIRMAN BOLLWERK: All right. Thank you.  
9 Why don't we just move down the line,  
10 then.

11 MS. SUTTON: Good morning. I'm Kathryn  
12 Sutton. I'm a partner in the law firm of Winston &  
13 Strawn. I'm representing System Energy Resources,  
14 Incorporated.

15 MR. ZENKE: I'm George Zenke with System  
16 Energy Resources.

17 MR. O'NEILL: Martin O'Neill, an attorney  
18 with Winston & Strawn.

19 CHAIRMAN BOLLWERK: All right.

20 MR. LEWIS: I'm David Lewis from the law  
21 firm Shaw Pittman, representing Dominion Nuclear North  
22 Anna. Behind me are Gene Grachek, Vice President of  
23 Technical Support for Dominion, and Marvin Smith, who  
24 is the head of the ESP project.

25 MR. FRANZ: I am Steve Franz. I'm a

1 partner with the law firm of Morgan, Lewis & Bockius,  
2 in Washington. I represent Exelon Generation. With  
3 me from Exelon are Tom Mundy, Eddie Grant, and Bill  
4 Mayer.

5 MR. BESSETTE: Good morning. My name is  
6 Paul Bessette. I'm from Morgan Lewis, and I represent  
7 Exelon Generation, Clinton.

8 MR. WEISMAN: I'm Robert Weisman. I'm  
9 representing the NRC Staff. Also speaking today for  
10 the Staff will be Ann Hodgdon, Antonio Fernandez,  
11 Brooke Poole, Tyson Smith, and Darani Reddick.

12 CHAIRMAN BOLLWERK: All right. Thank you,  
13 everyone.

14 So there's no misunderstanding, I would  
15 note, as we stated in our June 4, 2004, issuance,  
16 presentations to the Board during this prehearing  
17 conference will be limited to the participant counsel  
18 who just identified themselves. Because these  
19 proceedings, regardless of the admissibility of any  
20 Petitioners' contentions, require mandatory Board  
21 findings on whether early site permit issuance would  
22 be either, one, inimical to the public health and  
23 safety or the common defense and security; or, two, a  
24 proposed facility or facilities having characteristics  
25 that fall within the parameters of the site can be

1 constructed and operated without undue risk to the  
2 public health and safety, taking into consideration  
3 the site criteria contained in 10 Code of Federal  
4 Regulations Part 100.

5           Following the board rulings on the  
6 admissibility of the contentions of the various  
7 Petitioners, the Board will issue hearing notices  
8 that, in accordance with 10 CFR Section 2.315(a), will  
9 afford members of the public an opportunity to  
10 provide, as appropriate, oral limited appearance  
11 statements on the issues.

12           Further, in that issuance or a subsequent  
13 notice, the Board will outline the times, places, and  
14 conditions of participation relative to the  
15 opportunity for oral limited appearance statements.

16           As the Board noted in its June 4th  
17 issuance, however, in the interim any member of the  
18 public can submit a written limited appearance  
19 statement providing his or her views regarding the  
20 issues in these proceedings. Those written statements  
21 can be sent at any time by regular mail to the Office  
22 of the Secretary, U.S. Nuclear Regulatory Commission,  
23 Washington, D.C. 20555-0001, to the attention of the  
24 Rulemakings and Adjudications Staff, or by e-mail to  
25 hearingdocket -- all one word -- H-E-A-R-I-N-G-D-O-C-

1 K-E-T, at nrc.gov.

2 A copy of the statement also should be  
3 provided to me as the Chairman of the Atomic Safety  
4 and Licensing Board, sending it by regular mail to my  
5 attention at the Atomic Safety and Licensing Board  
6 Panel, Mail Stop T-3F23, U.S. Nuclear Regulatory  
7 Commission, Washington, D.C. 20555-0001, or by e-mail  
8 to gpb@nrc.gov.

9 As to the order of presentation by the  
10 participants in this prehearing conference, in our  
11 June 4th order we outlined a schedule for presentation  
12 that affords an opportunity for the participants to  
13 address the various contested matters now before the  
14 Board. We would intend to follow that schedule as  
15 closely as possible in terms of the issues and  
16 allocated times for argument.

17 In that regard, we'd request that before  
18 starting on an issue for which a participant has been  
19 afforded an opportunity for argument and rebuttal  
20 counsel should indicate how much of the total time  
21 allocation he or she wishes to reserve for rebuttal.  
22 The Board will be providing counsel with notice of the  
23 need to finish his or her presentation toward the end  
24 of its allocated argument time.

25 Also, as we noted in the June 4th

1 issuance, in making their arguments the participants  
2 should bear in mind that the Board has read their  
3 pleadings, and, as such, they should focus their  
4 presentations on the critical points and controversy  
5 as those issues have emerged as a result of the  
6 various participant filings.

7 Finally, at some juncture we'd like to  
8 have a brief discussion regarding some of the  
9 administrative details involved in this proceeding.  
10 And relative to administrative matters I would note  
11 that while this proceeding is in session all cell  
12 phones should be turned off or placed on vibrate, and  
13 any cell phone conversations should be conducted  
14 outside of this hearing room.

15 That all being said, before we begin with  
16 arguments regarding contention admissibility issues,  
17 we'd like to visit briefly one question about  
18 standing. This is a minor point, but I just wanted to  
19 clarify the record. I know in a number of instances  
20 the petitions that came in that were attached to the  
21 different intervention hearing -- the intervention  
22 requests, the hearing requests -- in some instances  
23 they specified a particular distance that the  
24 individual lived from the facility.

25 I think with respect to the Clinton

1 proceeding, however, they basically just stated they  
2 were all within 50 miles, and they gave an address.  
3 And I take it the counsel for the Applicant for  
4 Clinton has no problem with the way those were  
5 represented in terms of the representation in the  
6 affidavits?

7 MR. FRANZ: That's correct, Judge  
8 Bollwerk. We looked at the addresses, and they all  
9 appeared to be within 40 miles or so.

10 CHAIRMAN BOLLWERK: All right. All right.  
11 Thank you.

12 Again, with respect to standing, although  
13 it's not contested as a legal matter, the Board does  
14 have to make its own affirmative determination if  
15 there is standing, which is one of the things we would  
16 do in our initial prehearing order.

17 All right. Then, at this point, anyone  
18 else have anything else they want to say about the  
19 issue of standing? Yes?

20 MR. LEWIS: Not on standing, Judge  
21 Bollwerk. But just to let you know, your order had  
22 encouraged the three counsel for the ESP applications  
23 to try and coordinate their arguments, and so we've  
24 done that. We've divided up the three groups of  
25 common contentions with Dominion. I will argue 2.1 on

1 reactor interaction.

2 MS. SUTTON: I will argue on below grade  
3 containment.

4 CHAIRMAN BOLLWERK: All right.

5 MR. FRANZ: And I will argue on the waste  
6 confidence rule.

7 CHAIRMAN BOLLWERK: All right.

8 MR. LEWIS: And we would like to reserve  
9 five minutes of our time in case there is any factual  
10 clarification that one of the other counsel needs to  
11 add at the end of their argument.

12 CHAIRMAN BOLLWERK: All right. I do have  
13 one rule with respect to how these proceedings are  
14 conducted, which is the Petitioners get the last word,  
15 whatever is said, however it plays out in terms of  
16 additional -- I don't have a problem with  
17 clarifications for the record. It's probably useful  
18 in some instances. But the Petitioners will get the  
19 last word, whatever is said. And that's the rule that  
20 we'll follow here.

21 All right. Anything from either of the  
22 Board members before we get started? We appreciate  
23 you, by the way, getting together and putting your  
24 times together and making one presentation with  
25 respect to each of those issues. I think that will be

1 a more efficient way to do it, certainly, on those  
2 particular issues.

3 Anything the Staff wants to say in that  
4 regard? No?

5 All right. The first issue, then, we had  
6 -- or the groups of issues -- were dealing with safety  
7 assessment of reactor interaction. And these are  
8 contentions for the Clinton site safety analysis of  
9 2.1, North Anna SSA 2.1, and also Grand Gulf SSA 2.1.

10 MS. CURRAN: All right.

11 CHAIRMAN BOLLWERK: Are you doing the  
12 honors, Ms. Curran?

13 MS. CURRAN: Yes, I will be.

14 CHAIRMAN BOLLWERK: All right. And how  
15 much time do you want to save for rebuttal?

16 MS. CURRAN: Well, maybe what I should do  
17 is I was going to take 20 for my argument and 20 for  
18 rebuttal. But maybe I'll take 15 for my argument, 20  
19 for rebuttal, and five for surrebuttal.

20 CHAIRMAN BOLLWERK: All right. You  
21 probably don't have to do that, but that's -- why  
22 don't you just go ahead and divide it between rebuttal  
23 and -- regular time and rebuttal, and we'll --

24 MS. CURRAN: Okay.

25 CHAIRMAN BOLLWERK: -- deal with the

1 surrebuttal separately.

2 MS. CURRAN: All right. And I have taken  
3 it to heart that you've read all the pleadings, and  
4 I'm not going to belabor the argument. I will focus  
5 on the important points of dispute here and --

6 CHAIRMAN BOLLWERK: Just so I know, how  
7 much rebuttal time are you saving, then?

8 MS. CURRAN: 20.

9 CHAIRMAN BOLLWERK: 20?

10 MS. CURRAN: 20 and 20.

11 CHAIRMAN BOLLWERK: 20 and 20. Okay,  
12 thank you.

13 MS. CURRAN: This first contention is  
14 virtually identical for all three plants. It asserts  
15 that the applications for all of these plants need to  
16 look at the interaction between the proposed reactors  
17 and the existing reactors, which have fundamentally  
18 different designs in the degree to which they are  
19 considered -- that it's considered necessary to  
20 protect against an accident.

21 The contentions do not challenge the  
22 design of the advanced reactors. That's a  
23 misconception by the Applicants. They challenged the  
24 suitability of locating -- of collocating a reactor of  
25 an advanced design with the reactor of an existing

1 design.

2 And for this we rely on the plain language  
3 of 10 CFR 52.17, which requires consideration of the  
4 relationship between the design features of the  
5 proposed plant and the site characteristics. For all  
6 three of these sites, it is one of the basic elemental  
7 site characteristics that there is already a nuclear  
8 plant on the site, and we rely on the numerous  
9 criteria in 10 CFR 50.34(a)(1)(ii) regarding  
10 radiological consequences that the 52.17 requires be  
11 evaluated.

12 An argument has been made that the only  
13 dose consequence criteria that may be considered are  
14 the criteria at the site area boundary in 10 CFR  
15 Part 100. But if that were so, then I think the  
16 regulation would have specifically referenced those  
17 criteria and not referred to 10 CFR 50.34. Basically,  
18 it would be a very repetitive regulation if you read  
19 it to only refer to those dose consequence criteria in  
20 Part 100.

21 The NRC itself has -- well, they make an  
22 argument -- both the Applicants and the Staff make an  
23 argument that site characteristics were intended to be  
24 separated from design characteristics in the various  
25 iterations of Part 52 and Part 100. But even the NRC

1 admits that that was not complete. It isn't possible  
2 to completely separate design issues from siting  
3 issues.

4 I believe the Applicants and the Staff  
5 both argue that the contention -- the contentions lack  
6 specificity, because we didn't provide source terms  
7 for accidents at the advanced reactors and accidents  
8 at the existing reactors. However, we had -- we  
9 relied on expert support for this contention.

10 David Lockbaum, who is an engineer,  
11 nuclear engineer with the Union of Concerned  
12 Scientists, his basic thesis is that advanced reactors  
13 are not expected to have such severe accidents as the  
14 existing generation of reactors. And, therefore,  
15 their design is not as robust.

16 And I think it's notable that none of the  
17 parties challenged that basic premise of the  
18 contention. They argue that we should have provided  
19 more detail in support of that assertion, but they  
20 didn't contest that basic assertion which was made by  
21 an expert with knowledge of the design of advanced  
22 reactors and the current generation of existing  
23 reactors.

24 The other parties also challenged Mr.  
25 Lockbaum's declaration as not being specific enough.

1 The way we prepared this contention and some others  
2 where we relied on experts was the expert actually  
3 drafted the contention and was responsible for what  
4 was in it. And so all of the factual assertions in  
5 the contention were supported by the expert.

6 We didn't think it was necessary to  
7 reiterate all of those factual assertions in his  
8 declaration. We simply had him state that he was  
9 responsible for the declaration and that the facts in  
10 the declaration -- that he was responsible for the  
11 contention, excuse me, and that the facts in the  
12 contention were true and correct to the best of his  
13 knowledge, and the opinions were based on his  
14 professional judgment.

15 I believe that is sufficient to meet the  
16 NRC's admissibility standards in 10 CFR 2.309. It  
17 certainly gave the other parties notice of what the  
18 technical facts were that we were relying on, and that  
19 they were supported by an expert.

20 Okay. I believe it was Dominion -- in  
21 Dominion's response, Dominion cited some language from  
22 an NRC Staff Guidance Document, RS-002, which is the  
23 NRR review standard for ESP applications. There is a  
24 statement in Attachment 2 of this Regulatory Guide  
25 that states that radiological consequences related to

1 control room personnel will be evaluated as part of  
2 the combined license review. So Dominion is arguing  
3 this should be -- this issue should be postponed until  
4 the construction application.

5 It seems to us that it is more appropriate  
6 under the general approach of the NRC's regulations  
7 for early site permits to evaluate the suitability of  
8 each of these sites for collocation of an advanced and  
9 existing generation reactor at this stage rather than  
10 waiting until the construction permit stage. I  
11 believe that we are entitled to challenge this  
12 regulatory guide, and I'd like to give you a citation  
13 for that.

14 That is the Louisiana Services LP case for  
15 the Claiborne Enrichment Center, LBP-91-41, 34 NRC  
16 page 332. The year is 1991. And the jump site is  
17 page 354, in which the Licensing Board held that it is  
18 permissible to challenge a regulatory guide or to look  
19 at alternatives-- alternative means of satisfying the  
20 regulations.

21 We are aware that this particular staff  
22 guidance document was put out for public comment in  
23 the Federal Register. But the U.S. Court of Appeals  
24 for the Third Circuit has addressed the issue of, how  
25 does one treat an NRC staff guidance document -- or in

1 that case it was a policy statement -- that is put out  
2 for public comment but it's not called a rule?

3 And that was Limerick Ecology Action v.  
4 NRC. The citation is 869 F.2d 719. And I believe the  
5 page is 733. This was the Third Circuit. And I seem  
6 to have mislaid my copy, but I can get you a more  
7 precise cite after we take a break.

8 And in that case the court said if the NRC  
9 does not specifically label an issuance a rule, then  
10 the public isn't required to divine that that's what  
11 the NRC intended it to be. If the NRC wants to make  
12 some staff guidance document binding, it should treat  
13 it as a rulemaking and notify the public in that way,  
14 in a proposed rule, that it's intended to be binding.

15 And, finally, I'd like to make a  
16 correction. I believe that early in the contention --  
17 each of the contentions we make a reference to 10 CFR  
18 50.23(a)(1), and it should be corrected to 10 CFR  
19 50.34(a)(1).

20 I don't have anything more at this point.

21 CHAIRMAN BOLLWERK: Let me just turn to  
22 the Board members and see if anybody has any  
23 questions. I had a couple of things. I take it --  
24 you mentioned Mr. Lockbaum and his expertise. I mean,  
25 couldn't you have given some citation on one of the

1 advanced reactor designs, in terms of the control  
2 rooms, to say this control room clearly doesn't have,  
3 you know, the protection that one -- in one of the  
4 existing facilities? I mean, would that have been  
5 that difficult, to come up with that kind of citation,  
6 just --

7 MS. CURRAN: I guess the question is --

8 CHAIRMAN BOLLWERK: -- deal with this  
9 record question?

10 MS. CURRAN: He did the best he could with  
11 the time that he had, and I think the question is  
12 whether he needed to do that. He is someone with  
13 considerable expertise in the design and operation of  
14 nuclear facilities. He is generally familiar with the  
15 advanced reactor designs as compared to the existing  
16 reactor designs.

17 I don't know how accessible some of these  
18 details are of these designs, but in general he is  
19 aware -- he is aware of that fact, and none of the  
20 other parties challenged him on that. They simply  
21 demanded that he provided more detail. They didn't  
22 say that's not true.

23 CHAIRMAN BOLLWERK: Well, I guess what I  
24 saw here was sort of a question of burden going back  
25 and forth, which is, whose burden is it to say it

1 isn't true? Is it yours to say that it -- to show  
2 that it is true by giving a citation? Or is it  
3 theirs, since you put it out there as a general  
4 matter, to then come up with a citation that says,  
5 "No, in fact, that isn't the case"?

6 MS. CURRAN: Well, I would think that if  
7 we support a statement like that with a declaration  
8 from an expert who is generally familiar with those  
9 design issues, whether he has a specific cite to a  
10 specific design, that having provided a statement like  
11 that that's supported by an expert, it would be  
12 incumbent on the licensees or the applicants to say,  
13 "Well, you're absolutely wrong about that." And they  
14 haven't.

15 I mean, if we're absolutely wrong on some  
16 matter of fact, the contention doesn't go in. But no  
17 one has tried to demonstrate that, and we have -- and  
18 we didn't just assert this out of the blue. We relied  
19 on an expert with knowledge of these things.

20 CHAIRMAN BOLLWERK: In terms of the way  
21 you drafted the affidavit of your expert, I've noticed  
22 -- we've seen these in two different forms. One is an  
23 affidavit where the expert goes into some detail about  
24 the particular contention that they are concerned  
25 about, and then those facts are then incorporated into

1 the contention itself, and in other cases -- I guess  
2 the one like you have proffered here -- where they  
3 basically say the expert supports the contention.

4 Do you see -- I'm going to ask the same  
5 question of counsel for the other parties. Is one  
6 better than the other? Is one precluded? I mean,  
7 that seems to be the argument that they're making.  
8 The one that I describe where the expert goes into  
9 some detail about what their factual bases for their  
10 opinion are and what that opinion is in a separate  
11 affidavit is a better format. In fact, maybe the  
12 required format.

13 MS. CURRAN: It certainly isn't required.  
14 It's not specified in the regulations as being  
15 required. The question is whether the regulations, as  
16 they were amended in the early '90s for admissibility  
17 of contention, raised the standard so that it was more  
18 clearly stated that one had to provide documentation  
19 or some kind of support for factual assertions in a  
20 contention. And that included -- it was suggested  
21 that one could support a contention with expert  
22 affidavits.

23 But then the question is: well, what do  
24 you have to do to give notice to the other side that  
25 you've raised a legitimate concern? If you put all

1 the information that you have, that the expert has, in  
2 the contention, if the contention itself is the  
3 expert's work, then in our view it shouldn't be  
4 necessary to have a separate reiteration of all of  
5 that information in a declaration, that the witness is  
6 saying, "This is my work. I stand by these  
7 assertions." And that gives -- that puts the other  
8 side on notice as to what your concerns are and that  
9 they're supported.

10 CHAIRMAN BOLLWERK: Essentially where  
11 they've come from, is that what you're saying?

12 MS. CURRAN: I'm sorry?

13 CHAIRMAN BOLLWERK: Where they've come  
14 from, where the information in the contention has come  
15 from.

16 MS. CURRAN: Yes.

17 JUDGE ABRAMSON: And in your view, Ms.  
18 Curran, a bare assertion by an expert is sufficient.  
19 He needn't provide any reference?

20 MS. CURRAN: Well, to begin with, I think  
21 an expert who is qualified and who knows the issues,  
22 and who says, "I know -- I am generally familiar with  
23 these concepts, and this is something that I know,"  
24 that, no, he doesn't need to give a citation to a  
25 document. We would -- if we hadn't used an expert .

1 affidavit, I think we would have had to do that.

2 If we had not used David Lockbaum, we  
3 would have needed to ourselves cite to an application  
4 for an advanced reactor and an FSAR for an existing  
5 reactor. But having this expert opinion I think  
6 raises the level of what we have provided.

7 CHAIRMAN BOLLWERK: Anything further?  
8 Just one other question, from me anyway. Does the  
9 principle that you're espousing here, in terms of the  
10 need to look at the reactor design when there is -- in  
11 this case there is an existing reactor or reactors on  
12 the site, and a new reactor going to be built, or  
13 reactors, is that applied equally to an instance  
14 where, let's say, there are no existing reactors on a  
15 site, but there are potentially different kinds of new  
16 reactor designs that could be used?

17 Some of these have -- you've indicated I  
18 guess there's always a possibility you can use two  
19 different designs on the same site. Do you then have  
20 to talk -- does this principle apply there, so that  
21 the interaction between those two designs potentially  
22 can be looked at in terms of the early site permit,  
23 two brand-new reactor designs?

24 MS. CURRAN: Yes, I think conceivably,  
25 except that as a practical matter I'm not sure that

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1 there is enough focus on what's going to happen to do  
2 that, because the Applicant is proposing a range a  
3 range of reactors. There are several that are being  
4 offered, and one doesn't know which one they will  
5 pick. One assumes they'll probably pick the same  
6 design for both reactors as a matter of economy. So  
7 I'm not sure if your question ever has any real  
8 practical application in this context.

9 CHAIRMAN BOLLWERK: Well, I mean,  
10 obviously within that range -- and there was a range  
11 given here for several of the sites -- it could be  
12 anything from a gas-cooled reactor to some kind of an  
13 advanced reactor that -- I mean, those may have the  
14 sorts of interactions I guess you're talking about.  
15 Would that, then, be subject to the designs being  
16 compared and contrasted?

17 MS. CURRAN: Well, the regulations don't  
18 seem to contemplate that the proposed designs be  
19 compared and contrasted, just because they don't  
20 require that one be very specific about it. But I  
21 think the issue that we're raising is more concrete.  
22 We know there's a plant on all three sites already,  
23 and so -- and the question is: how is it going to  
24 interact with a plant of one of these new designs, one  
25 of the three or so that have been identified?

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1           In much the same way there's another  
2 regulation in -- I think it's in 10 CFR Part 100 that  
3 says the NRC is supposed to look at other  
4 characteristics of the area, manmade hazards that  
5 might interact with a proposed plant.

6           JUDGE ABRAMSON: Help me understand what  
7 kinds of interaction you expect. These plants aren't  
8 going to get up and move around. What kind of  
9 interactions are we talking about?

10           MS. CURRAN: Well, the one that we raise  
11 in our contention is if there is a -- if there is an  
12 accident at the existing reactor, and there is a  
13 radiological release from the containment, is the  
14 control room at the advanced reactor sufficiently  
15 protected so that the operators at the advanced  
16 reactor will be protected during an accident to the  
17 regulatory standard? That's one part of it.

18           Then, the other part of it had to do with  
19 environmental qualification. Again, assuming that  
20 there is a release from the existing plant, the other  
21 plants are I think something like 500 feet away. And  
22 this, in Mr. Lockbaum's view, is close enough for the  
23 radiological release to have an impact on the  
24 equipment in the new reactor. Would this have an  
25 adverse impact that -- such that it's not a wise thing

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1 to put this type of new design next to a plant of an  
2 existing design?

3 JUDGE BARATTA: You cited 52.17 as  
4 requiring this type of design. Could you be more  
5 specific?

6 MS. CURRAN: Okay. I am reading from  
7 52.17, where it says, "The application must also  
8 contain a description and safety assessment of the  
9 site on which the facility is to be located. The  
10 assessment must contain an analysis and evaluation of  
11 the major structure, systems, and components of the  
12 facility that bear significantly on the acceptability  
13 of the site under the radiological consequence  
14 evaluation factors identified in Section 50.34(a)(1)  
15 of this chapter."

16 So the regulation is concerned with the  
17 major structures, systems, and components of the  
18 facility that bear significantly on the acceptability  
19 of the site under radiological dose consequence or  
20 dose evaluation -- radiological consequence evaluation  
21 factors. And we have a disagreement as to which of  
22 those factors apply. But in our view, if you read  
23 Section 50.34(a)(1), you can't read it to restrict it  
24 to the dose consequence factors that the Applicants  
25 and the Staff argue it's limited to.

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1 JUDGE ABRAMSON: So is it accurate, then,  
2 for me to state that your contention relates solely to  
3 the radiation consequences, to the control rooms on  
4 the existing plants, or vice versa? That it's  
5 strictly a dose within the control rooms that you're  
6 worried about or on the two plants? Or are you asking  
7 for other interactions to be examined?

8 MS. CURRAN: It's the effect of one plant  
9 on another. It's not -- we're not --

10 JUDGE ABRAMSON: Generally. So you're  
11 worried about transmission line effects. I mean, how  
12 far does this go?

13 MS. CURRAN: No. Well, I think the  
14 general thrust of the contention is if there is a  
15 radiological release from the first plant, then one  
16 must look at what is the effect on the new plant, and  
17 in the context of considering: is this a suitable  
18 site?

19 CHAIRMAN BOLLWERK: Anything else from  
20 either of the Board members? Judge Abramson?

21 All right. I believe, Mr. Lewis, you were  
22 -- you volunteered.

23 MR. LEWIS: Thank you. We agree that this  
24 contention is a matter of plain language. The plain  
25 language of the provision that the Petitioners allege

1 a violation of states that you have to look at the  
2 systems, structures, and components that bear on the  
3 acceptability of the site under the radiological  
4 consequence evaluation factors in 10 CFR 50.34(a)(1).

5 There really is -- can be no doubt that  
6 the radiological consequence evaluation factors in  
7 that regulation are the dose limits at the EAB -- at  
8 the exclusion area boundary, and at the boundary of  
9 the low population zone, the LPZ. But there are  
10 simply no other factors in 50.34(a)(1) that evaluate  
11 radiological consequences.

12 And there is also, with respect to all  
13 three applications, no dispute that the applications  
14 show compliance with these dose limits, and also  
15 discuss the systems, structures, and components that  
16 bear on that analysis. And, therefore, there is no  
17 genuine dispute on a material issue in this  
18 proceeding.

19 Now, Petitioners argue that there are  
20 other factors in 50.34(a)(1)(ii) which they say should  
21 be considered -- such radiological consequence  
22 evaluation factors. But simply a plain reading of  
23 those provisions shows that it's not the case. They  
24 referred to three provisions. This is -- I'm looking  
25 at the Dominion reply on page 3.

1           They say that the rule says it's expected  
2 that reactors will reflect, through their design,  
3 construction, and operation an extremely low  
4 probability for accidents that could result in a  
5 release of significant quantities of radioactive  
6 fission products. That is an expectation of design.  
7 It's not a factor for evaluating radiological  
8 consequences.

9           They next state that the rule requires an  
10 evaluation of the extent to which the reactor  
11 incorporates unique, unusual, or enhanced safety  
12 features having a significant bearing on the  
13 probability or consequences of accidental releases of  
14 radioactive material. Again, this is revision  
15 requiring a construction permit applicant to specify  
16 safety features. It's not a provision that provides  
17 a factor for evaluating radiological consequences.

18           And, finally, they refer to a provision  
19 that says, "Special attention must be directed to  
20 plant design features intended to mitigate the  
21 radiological consequences of accidents." This  
22 provision says pay attention to design. It's not a  
23 provision that says, "Here is a factor for evaluating  
24 radiological consequences."

25           I should point out, too, that those

1 sentences are all from 50.34(a)(1)(ii), a provision  
2 that calls for an assessment of the site and  
3 assessment of the facility. Clearly, the early site  
4 permitting rules only require an assessment of the  
5 site, and this rule in particular only requires that  
6 systems, structures, and components that bear on the  
7 radiological consequence evaluation factors be  
8 addressed.

9 Ms. Curran was asked whether her  
10 contention seeks an evaluation of interaction more  
11 broadly than the examples that were given in her  
12 contention and reply. To the extent that she is  
13 asking for some interaction beyond the control room  
14 design and environmental qualification, I would submit  
15 that her contention is too vague to admit such an  
16 issue. And she hasn't specified what such  
17 interactions would be.

18 The only two examples that she has given  
19 are control room design and environmental  
20 qualification of equipment. And with respect to those  
21 two subjects, she says -- her contention says you've  
22 got to show compliance with the General Design  
23 Criteria. And she can call this a site suitability  
24 contention, but the wording of the contention and the  
25 basis itself says, "The applicant has not shown that

1 workers in the control room would be adequately  
2 protected as required by GDC-19." That's a General  
3 Design Criteria issue.

4 And in the very next paragraph of the  
5 basis, they discuss complying with GDC-4. Compliance  
6 with the General Design Criteria is the subject of a  
7 different regulation. It's in 50.34(a)(1) -- sorry,  
8 (a)(3). 50.34(a)(3) is not one of the regulations  
9 that's spelled out in 52.17. So she is asking for an  
10 evaluation of issues that are specified in provisions  
11 of the rules that are not incorporated into Part 52.

12 The simple fact is there is nothing in  
13 10 CFR 52.17 or in 10 CFR 50.34(a)(1) that requires a  
14 demonstration of compliance with the GDC. Of course,  
15 the reason for that is pretty clear. The design  
16 information to show compliance with the GDC may not  
17 exist at the early site permit stage.

18 In essence, what the Petitioners are doing  
19 is they are trying to construe the ESP regulations in  
20 a manner that would preclude a person from obtaining  
21 an early site permit, unless they have already chosen  
22 and developed the design, because you're not going to  
23 be able to show how you're complying with the GDC  
24 unless you're able to specify some design details.

25 And I submit that such a reading would be

1 not only unreasonable, but it would frustrate one of  
2 the basic purposes of these regulations, which is to  
3 allow you to get an early site permit before you've  
4 invested the money in developing detailed design work.

5 The Petitioners also argue that they've  
6 got to do it now because they can't do it later.  
7 These designs may be locked up by a design  
8 certification. Well, if there's a design issue on a  
9 certified -- on a reactor that's going to be  
10 certified, they should raise it in the design  
11 certification proceeding. They can certainly do that.

12 Or, if there really is a site-specific  
13 design issue, they can raise that in a construction  
14 permit and operating license proceeding, combined  
15 license proceeding, because 10 CFR 52.79(b) allows  
16 site-specific design issues to be raised in a COL  
17 proceeding.

18 So just as a matter of law, you know, this  
19 contention has no legal basis. They are asking for an  
20 evaluation of issues that are simply outside the scope  
21 of the ESP proceeding. But this contention also has  
22 no basis.

23 Ms. Curran was asked whether Mr. Lockbaum  
24 could have given more examples from design  
25 certification proceedings, and she replied, I believe,

1 that, "Well, Applicants really haven't challenged the  
2 assertion that advanced reactors will be safer and,  
3 therefore, have less protective features."

4 I think what all of the Applicants said,  
5 and certainly Dominion said, was that that's a very  
6 vague generalization. It doesn't say anything about  
7 control room design. It doesn't, as a pure matter of  
8 logic, establish that control room designs will be  
9 less protective. And, therefore, that statement, even  
10 if you accept it as true, would not provide a logical  
11 basis for the contention. It would not establish that  
12 control rooms of future plants are going to be less  
13 protective.

14 And we did not go into further factual  
15 information. Dominion did not. I'll let the other  
16 Applicants speak for themselves, if they need to add  
17 -- because how the plants will comply with the GDC is  
18 not part of our application. And, therefore, the  
19 factual information on compliance with GDC-19 is not  
20 in the application.

21 That does not mean that we agree that the  
22 control room designs for future plants are going to be  
23 less protective. If you, in fact, went to the plant  
24 that is already certified, the one plant that makes up  
25 the plant parameter envelope, the PPE -- that's the

1 ABWR -- you would not find a less protective control  
2 room. You would find a control room that has the  
3 ability to isolate itself from the environment for a  
4 much greater period than most existing plants.

5 If you went to the design control document  
6 for the AP1000, which is not yet certified but is in  
7 the certification process, the same would be true.  
8 Now, there's other more advanced plants where that  
9 information isn't available yet. But the vague  
10 generalization that future plants will have smaller  
11 source terms, and, therefore, they are less protective  
12 simply does not provide the basis to assume that  
13 future applicants are going to violate the GDC.

14 They'll have to comply with the General  
15 Design Criteria. They'll have to show that their  
16 design of their control rooms are protective. And to  
17 do so they'll have to provide the design information.  
18 That showing belongs either in the design  
19 certification proceedings or in the COL proceeding.

20 CHAIRMAN BOLLWERK: Anything further?

21 MR. LEWIS: No.

22 JUDGE BARATTA: So in looking in 52.79(b),  
23 I think you're -- correct me if I'm wrong -- but what  
24 you're talking about there is the sentence that deals  
25 with -- you're referencing a certified design, those

1 portions of the design which are site-specific must be  
2 spelled out. Is that correct?

3 MR. LEWIS: Yes.

4 JUDGE BARATTA: Okay. And you would take  
5 that, then, as the existence of another nuclear  
6 facility on that site, the company that is site-  
7 specific?

8 MR. LEWIS: Unless it has already been  
9 resolved in the design certification proceeding. The  
10 design certification could specify the accidents and  
11 the shielding and the source terms that the design is  
12 designed to meet, and it could in fact establish the  
13 parameters that an acceptable site would fit.

14 And if at that point the certification is  
15 already encompassed, a site with the same  
16 characteristics as a site with an existing reactor,  
17 there would be no issue. It could be resolved either  
18 in the COL proceeding or in the design certification  
19 proceeding, but it will be resolved one or the other.

20 JUDGE BARATTA: Thank you.

21 CHAIRMAN BOLLWERK: All right. Any  
22 questions?

23 MR. FRANZ: Judge Bollwerk?

24 CHAIRMAN BOLLWERK: Yes.

25 MR. FRANZ: If I can add one thing very

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1 quickly for Exelon. We also agree -- and I think Mr.  
2 Lewis made the case very well -- that this is a design  
3 issue and not a setting issue. I think this is  
4 demonstrated by the fact that the Petitioners are not  
5 complaining about all reactors that could be located  
6 at the new sites. They are only complaining about  
7 certain advanced reactors.

8 Well, if the other perhaps older reactors,  
9 if I can use that term, are satisfactory for location  
10 on these sites, then obviously it's not a siting  
11 issue. It must be a design issue. And there's  
12 nothing that would prevent the NRC -- and, in fact, I  
13 think the NRC would be required to consider design  
14 features in these advanced reactors to ensure that  
15 they can withstand accidents in a collocated plant.

16 Thank you.

17 CHAIRMAN BOLLWERK: Anything further? No?

18 All rights. Ms. Curran, then I guess it's  
19 back to you for rebuttal.

20 MR. WEISMAN: Your Honor?

21 CHAIRMAN BOLLWERK: Oh, I'm sorry.

22 (Laughter.)

23 MR. WEISMAN: The Staff might --

24 (Laughter.)

25 CHAIRMAN BOLLWERK: We've got so many

1 people here I'm losing track already.

2 (Laughter.)

3 Staff, I apologize.

4 MR. WEISMAN: Thank you, Your Honor. At  
5 the outset, the Staff emphasizes that one fundamental  
6 principle governs many of the issues that are now  
7 before the Board. That principle is based on the  
8 Commission's requirements in Part 52 that govern the  
9 three early site permit proceedings over which the  
10 Board is presiding.

11 Part 52 sets out the requirements and  
12 procedures that apply to the NRC's review of  
13 applications requesting approval of a site for a  
14 nuclear power facility separate from the filing of an  
15 application for a construction permit or a combined  
16 license or COL for such a facility.

17 Since an ESP proceeding involves approval  
18 of a site for a facility, it is limited to siting  
19 issues alone. Simply stated, design issues  
20 appropriate to consider in the construction permit COL  
21 or design certification proceedings are outside the  
22 scope of an ESP proceeding.

23 This fundamental principle is a common  
24 thread connecting many of the issues the Staff will be  
25 discussing at this prehearing conference.

1 I forgot to mention that the Staff would  
2 like to reserve five minutes for rebuttal, if that's  
3 necessary.

4 CHAIRMAN BOLLWERK: All right.

5 MR. WEISMAN: Okay. The Staff would agree  
6 with the Applicants that the wording in Section 52.17  
7 is clear. The regulation refers to radiological  
8 consequence evaluation factors, and the Staff would  
9 submit that those are factors for evaluating the  
10 acceptability of radiological consequences.

11 The only factors that do that are the  
12 criteria for dose acceptability at the exclusion area  
13 boundary and for the low population zone, which are  
14 given in 50.34(a)(1). Petitioners made a comment  
15 during their oral argument that the consequences  
16 criteria were in Part 100. But, in fact, the  
17 acceptance criteria do not appear in Part 100. Part  
18 100 references 50.34(a)(1) for those acceptance  
19 criteria.

20 We would also agree with the Applicants  
21 that the various design considerations that  
22 Petitioners identify don't have any relevance to  
23 radiological consequence evaluation factors. And we  
24 won't belabor that point, as the Applicants have  
25 thoroughly described that.

1           Beyond that, the fundamental issue with  
2           respect to this contention is that it doesn't  
3           challenge the applications. It does not identify any  
4           site parameters that are omitted from the application.  
5           It does not identify any disagreement with any of the  
6           site parameters that are included in the application.  
7           There simply is no dispute with any of the  
8           applications.

9           And as for the Petitioners' assertion that  
10          neither the Staff nor the Applicants fail to contest  
11          the Petitioners' assertion that the new plants will  
12          not be as rugged as the older plants, that's a merits  
13          question. If there were any disagreement on what the  
14          design of the new plants would accomplish, that would  
15          be something that would be litigated in the merits.  
16          That's a merits question. There's no need for the  
17          Staff or the Applicants to contest that assertion at  
18          this stage.

19          Further, the Petitioners did not identify  
20          any specific issue with respect to the designs, since  
21          they all -- they did not identify any dispute with the  
22          site parameters, but nor did they give any detailed  
23          information contesting or asserting that there was  
24          something deficient in the design -- how the old  
25          plants would affect the new plants.

1                   And under 10 CFR 2.309(f)(1)(v), the  
2                   Petitioners are obligated to either put in facts, a  
3                   concise, specific statement of facts, or an expert  
4                   opinion. They chose to provide an expert opinion,  
5                   together with references to the specific sources and  
6                   documents on which the Petitioner intends to rely to  
7                   support its position.

8                   The Petitioners asserted that the design  
9                   information was not readily available. But if we  
10                  inspect Appendices A, B, or C, to Part 52, which are  
11                  where the standard design certifications are, it's  
12                  quite clearly identified that the information in the  
13                  design control document for each of those designs is  
14                  available in the public -- NRC's public document room.  
15                  It's available from -- and it's available from other  
16                  sources as well. Had Petitioners sought to identify  
17                  what they thought were design deficiencies, they could  
18                  have easily done so.

19                  Petitioners in their reply -- and here at  
20                  this prehearing conference -- are now asserting that  
21                  they are concerted with siting. But that is not  
22                  consistent with the language that they used in their  
23                  original proposed contentions.

24                  For instance, in the North Anna -- the  
25                  proposed contentions for the North Anna site, there is

1 a statement at page 4 that the safety assessment for  
2 the North Anna ESP application is deficient because it  
3 does not adequately consider the relationship between  
4 the design of the proposed new reactor and the design  
5 of the existing reactors on the site.

6 It simply doesn't mention siting, and we  
7 can find nowhere in the proposed contentions where  
8 Petitioners dispute siting.

9 I think, finally, the Petitioners are  
10 asserting that they would not have the opportunity to  
11 challenge any design issues except in this proceeding,  
12 and that is simply incorrect. As the Applicants  
13 mentioned, any design issues that would resolve the  
14 problem that Petitioners assert, if addressed in a  
15 design certification rulemaking, could be -- the  
16 Petitioners could participate in that. They could  
17 participate in the design certification rulemaking by  
18 commenting on the rule. That would be the proper  
19 venue for making those assertions and not any of these  
20 proceedings.

21 If the design issues in the design  
22 certification rule doesn't resolve the issue -- the  
23 design issues that Petitioners assert, then they would  
24 be open for litigation in a COL proceeding.

25 And I'd just like to conclude by noting

1 that the Petitioners have identified, both in their  
2 petition and in their reply, the distances from --  
3 that would separate the new units from the old units  
4 at the Grand Gulf sites and at the North Anna site.

5 At Grand Gulf, it would be at least 1,200  
6 feet according to the original petition. And at North  
7 Anna, it would be 570 feet. And I note this because  
8 Petitioners don't give us any criteria by which to  
9 measure whether this is an acceptable separation. It  
10 highlights the fact that the Petitioners have not  
11 identified any site criteria that there is a dispute  
12 about. So neither the Staff nor the Applicants would  
13 know what the Petitioners want to litigate.

14 I think that's all that the Staff has to  
15 say today on this issue right now.

16 CHAIRMAN BOLLWERK: Okay. Any questions  
17 from either of the Board members?

18 I just had -- as I understood Ms. Curran's  
19 arguments, basically Dr. Lockbaum -- Mr. Lockbaum --  
20 is it Dr. Lockbaum? I'm sorry.

21 MS. CURRAN: Mr.

22 CHAIRMAN BOLLWERK: Mr. Lockbaum is a  
23 fairly well-known individual in the nuclear area. He  
24 is known for his expertise in respect to nuclear  
25 matters, and he has expressed a concern as -- on the

1 basis on that expertise.

2 While they didn't cite to the particular  
3 portions of any of the applications given, the amount  
4 of the -- or the early site permit -- rather, the  
5 reactor design, the advanced reactor designs, given  
6 the time they had to prepare the contentions, that was  
7 -- he did what he could in the time he had, and no one  
8 else has come forward and said that isn't so. I mean,  
9 why isn't that sufficient?

10 MR. WEISMAN: Your Honor, the rule  
11 provides that an expert opinion has to be supported by  
12 references to specific sources and documents. We  
13 don't find any such support in any of the petitions,  
14 any of the proposed -- in this proposed contention,  
15 there is no such support.

16 JUDGE BARATTA: It would seem, though,  
17 that if I'm interpreting his -- the contention, this  
18 is a contention of omission, in which case it wouldn't  
19 be.

20 MR. WEISMAN: Well, Your Honor, I am not  
21 sure I understand your question completely. But let  
22 me try, and you'll correct me if I haven't answered  
23 your question. If there was a site parameter that was  
24 omitted, we would expect the proposed contention to  
25 identify what was omitted. And there is no site

1 parameter that is proposed to be included. The  
2 Petitioners didn't identify anything.

3 Now, maybe that's half of your question.

4 I --

5 JUDGE BARATTA: That's my question.

6 MR. WEISMAN: All right. Thank you.

7 CHAIRMAN BOLLWERK: Is there a question --  
8 there's no discussion of this interaction. I mean, is  
9 that --

10 JUDGE BARATTA: That's omitted. That's  
11 what I gather is alleged -- that it's an omission,  
12 interaction between the existing facility with respect  
13 to this specific case and --

14 MR. WEISMAN: Your Honor, if I may, the  
15 only -- the only discussion that the Petitioners  
16 identify as being missing has to do with design, and  
17 not with siting. If they had identified some siting  
18 issue that should have been discussed, perhaps that  
19 might have been admissible. But the contention itself  
20 -- the bases for the contention only discusses design  
21 of the new reactors.

22 And since we believe that design is  
23 appropriate to be considered at the COL stage, or in  
24 the design certification stage, that would not be an  
25 appropriate basis for this proceeding.

1 JUDGE BARATTA: At the time, there are,  
2 are there not, a couple of plants that have gone  
3 through the whole design certification process,  
4 correct?

5 MR. WEISMAN: There are three designs that  
6 have completed -- that have been certified. Yes.  
7 Yes, Your Honor.

8 JUDGE BARATTA: Okay. And those are?

9 MR. WEISMAN: Those are the advanced  
10 boiling water reactor, ABWR; the Combustion  
11 Engineering System 80 Plus, which is I believe  
12 Appendix B to Part 52; and the Westinghouse AP600  
13 design in Appendix C; and as I believe -- I don't  
14 remember which of the Applicants mentioned the AP1000.  
15 The Westinghouse design is in the process. It is  
16 being considered. The Staff is reviewing that design.

17 JUDGE BARATTA: Now, when they complete --  
18 when they are granted design certification, do you  
19 have any idea on the degree to which the design is  
20 actually complete? For example, are all 100 percent  
21 of the construction drawings finished? Or is it some  
22 fraction?

23 MR. WEISMAN: Your Honor, my understanding  
24 is that this would be -- the design control document  
25 contains FSAR, Final Safety Evaluation Report, or an

1 analysis report level of information. I do not know  
2 whether there are detailed design drawings available.  
3 There may be for some portions of the plant, but I do  
4 not know that they're available for the entire  
5 facility.

6 JUDGE BARATTA: So essentially it's the  
7 information that would normally be in an FSAR would  
8 have been needed at the point of design certification.  
9 Is that what you're saying? Am I correct?

10 MR. WEISMAN: Yes, Your Honor.

11 JUDGE BARATTA: Thank you.

12 CHAIRMAN BOLLWERK: Anything further?

13 Now we can turn to Ms. Curran. I'm sorry.

14 MS. CURRAN: All right. Well, I want to  
15 emphasize that this contention is not about the design  
16 of the advanced reactors. The focus is on the siting,  
17 the collocating of an advanced reactor on an existing  
18 -- the site of an existing reactor. And I think  
19 that's clear from the contention.

20 I'm looking at the Grand Gulf contentions  
21 -- and, again, these are all virtually identical  
22 contentions. The first sentence of the contention  
23 says, "The ESP application for Grand Gulf Unit 1 fails  
24 to comply with 10 CFR 52.17, because its safety  
25 assessment does not contain an adequate analysis and

1 evaluation of the major structures, systems, and  
2 components of the facility that bear significantly on  
3 the acceptability of the site."

4 Those are key words in the contention --  
5 the acceptability of the site, under the radiological  
6 consequence evaluation factors identified in 10 CFR --  
7 and it says 50.23. It should say 50.34.

8 If you turn a few pages into the basis of  
9 the contention, on page 5, there is a paragraph that  
10 starts, "There are many sites in the United States  
11 with more than one operating nuclear power reactor."  
12 And it says most of these sites the reactors have the  
13 same design.

14 And the concluding sentences here are,  
15 "But the reactors at these multiple units sites share  
16 the common trait of having the potential for a  
17 postulated accident causing significant amounts of  
18 radiation to be released. Placing a new reactor  
19 design at a site with one or more operating reactors  
20 of an earlier vintage creates a more difficult  
21 situation."

22 The concern of the contention is with the  
23 siting together of two reactors with potentially  
24 incompatible designs, and I think that can be clearly  
25 read from the contention.

1 I'd also like to just go over the  
2 relationship a little bit between 10 CFR 50.34 and  
3 10 CFR 52.17 and Part 100. Frankly, I find this to be  
4 somewhat confusing. But if you read it -- if you read  
5 the regulations the way the Applicants and the Staff  
6 would have you read them, then it doesn't make sense.

7 In 52.17, there is two requirements here  
8 regarding radiological consequences, evaluating those  
9 with respect to the site. One is that the sentence  
10 that we've been talking about -- that the assessment  
11 must contain an analysis and evaluation of the major  
12 structures, systems, and components of the facility  
13 that bear significantly on the acceptability of the  
14 site, under the radiological consequence evaluation  
15 factors identified in Section 50.34(a)(1) of this  
16 chapter.

17 The other requirement is that site  
18 characteristics must comply with Part 100 of this  
19 chapter. So there is two separate requirements. They  
20 wouldn't have said them both unless they meant each  
21 one to mean something different.

22 If you look at Part 100, in subpart B,  
23 Section 100.21(c)(2) -- now, these are -- let me back  
24 up. 100.21 gives acceptance criteria for sites.  
25 Section (c)(2) says, "Radiological dose consequences

1 of postulated accidents shall meet the criteria set  
2 forth in 50.34(a)(1) of this chapter."

3 So you look at these words, "radiological  
4 dose consequences," and you go back to 50.34 and look  
5 for language about dose consequences. In 50.34, the  
6 language about doses appears in 50.34(a)(1)(ii),  
7 subsection (d)(1) and (d)(2). And these have to do  
8 with doses at the boundary of the exclusion area and  
9 the boundary of the low population zone. And both of  
10 those sections use the word "dose."

11 So you have these -- going back to 52.17,  
12 which refers you to Part 100, which refers you to dose  
13 consequences, you -- you go through that exercise, and  
14 you get to 50.34(a)(2), (d)(1) and (2). But then  
15 you're still left with the first sentence that I read  
16 to you in 52.17, which says that -- it refers you to  
17 the radiological consequence evaluation factors  
18 identified in 50.34(a)(1).

19 And I don't think those can be read to be  
20 the same ones that are referred to in Part 100,  
21 because we just went through the Part 100 exercise.  
22 This has got to be something different. That's how we  
23 got to the first part of 50.34(a)(1)(ii), which is  
24 subsections (a) through (d), which talk about  
25 radiological consequences in relation to the design.

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1                   Now, you could read these regulations to  
2 say that they are purely concerned with the design,  
3 that that's all they have to do with. But you could  
4 also read them, which as we have read them, to be  
5 concerned with the relationship between the design and  
6 the site, because, really, as a practical matter you  
7 cannot completely divorce them.

8                   When you're looking at site suitability,  
9 you have to have -- you have to make some  
10 consideration of the design, and that's what we're  
11 talking about here. You cannot be completely blind to  
12 the design. You have to look at the interaction  
13 between the design and the site.

14                   I think I heard Mr. Lewis say that we were  
15 challenging Dominion's and the other Applicants'  
16 compliance with the General Design Criteria. We  
17 reference the General Design Criteria as an example of  
18 how this interaction between these two reactors could  
19 be significant, could be -- could pose a problem.

20                   You have to do that. You have to look at  
21 what the safety regulations are in order to evaluate  
22 whether the interaction of the plants could cause a  
23 safety risk. That was the purpose of referencing the  
24 General Design Criteria.

25                   I also heard Mr. Lewis say that the

1 control room designs in the advanced reactors are much  
2 better protected in the control rooms of existing  
3 plants. That's the first time that I have heard that,  
4 and we haven't really had an opportunity to respond to  
5 that, because it's being said here, and I do not have  
6 Mr. Lockbaum present to address that. I wish that it  
7 had been said in Dominion's response, and then we  
8 could have replied to it.

9 I think that's all I have.

10 CHAIRMAN BOLLWERK: All right. Go ahead.

11 JUDGE ABRAMSON: Ms. Curran, I'm looking  
12 at 52.17(a)(1). It contains a series of sentences,  
13 each setting forth particular content requirement for  
14 the application. If I go to the sentences you've been  
15 referring to, the application must also contain a  
16 description and safety assessment of the site on which  
17 the facility is to be located.

18 What's your focus on that? Your focus on  
19 that is that the site itself already has existing --

20 MS. CURRAN: Yes.

21 JUDGE ABRAMSON: The assessment must  
22 contain an analysis and evaluation of the major  
23 structures, systems, and components of the facility.  
24 What facility are they talking about?

25 MS. CURRAN: The proposed facility.

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1 JUDGE ABRAMSON: So you are saying that  
2 this first sentence says when you look at the site,  
3 you have to consider the fact that the site already  
4 has plants on it. The second sentence says you then  
5 have to look at the facility itself, consider the  
6 major systems that bear on the acceptability of the  
7 site to be radiological consequences.

8 So do I understand, then, that you're  
9 taking that second sentence to say, in combination  
10 with your view, that radiological consequences means  
11 radiological consequences to other -- on the site, in  
12 the control rooms of the existing -- so are you taking  
13 the second sentence to say look at the radiological  
14 consequences -- we're looking at evaluating the major  
15 structures of the new plant that bear on the  
16 acceptability of the site under radiological  
17 consequences.

18 So is this saying that we should be  
19 looking at -- that the Applicant should be looking at  
20 the radiological consequences of a release from the  
21 new facility to parties in the existing facility?

22 MS. CURRAN: No.

23 JUDGE ABRAMSON: Okay. Then why is it  
24 talking about assessment of the components of the  
25 facility bear on the acceptability of the site under

1 the radiological consequences? A site plan we must  
2 consider -- must include old plants.

3 MS. CURRAN: Right.

4 JUDGE ABRAMSON: Are you telling me this  
5 sentence says we've got to look at structures and  
6 components of the new plant to see how it bears on the  
7 acceptability of the site, which must consider the old  
8 plant? I'm missing something here. Help me with this  
9 link.

10 MS. CURRAN: Okay. In a nutshell, the  
11 major structures, systems, etcetera, of the new plant  
12 are designed differently from those in the existing  
13 plant, such that they are -- and they are less robust  
14 because they -- it's not expected that an accident is  
15 going to be severe, if there is one at one of these  
16 new facilities.

17 So that if you take into consideration  
18 that one of the characteristics of the site is that it  
19 has an existing plant that could have an accident of  
20 greater severity than what is anticipated for the new  
21 plant, then these major systems in the new plant may  
22 not be sufficient to cope with the radiological  
23 release from the first plant, from the existing plant.

24 JUDGE ABRAMSON: But I thought the  
25 sentence said you've got to look at the new plant and

1 see whether the site is suitable for the new plant  
2 vis-a-vis radiological consequences. Now, if you say  
3 -- if I'm plopping this plant down on a bare site, I  
4 would look at that site and see whether it's suitable.  
5 I would look at the radiological consequences of a  
6 release from this new plant as it affected the site  
7 I'm plopping it on.

8 Now, I'm plopping it on a site that has  
9 existing plants, so your argument is I should look at  
10 the fact that there are existing plants there.  
11 Therefore, I think that means I've got to look at  
12 whether the radiological releases from the new plant  
13 effect something unique about that site. But you're  
14 telling me it's the other way around.

15 MS. CURRAN: We're saying it's  
16 radiological releases from the existing plant that are  
17 of concern here. And I -- I think that -- I'm not  
18 sure I understand your concern either. But I think  
19 you can read this regulation to require an inquiry  
20 into that.

21 CHAIRMAN BOLLWERK: All right. Anything  
22 further?

23 JUDGE ABRAMSON: That's all I have.

24 CHAIRMAN BOLLWERK: All right. Anything,  
25 Mr. Lewis?

1 MR. LEWIS: Yes, one point. Petitioners  
2 state that this is really a site suitability issue,  
3 but there simply is no assertion that there is any  
4 characteristic of the site that would prevent a  
5 sufficiently protective control room from being built  
6 or from environmental qualification of cable being  
7 properly accomplished.

8 There is no allegation that those --  
9 compliance with design requirements can't be met.  
10 And, therefore, there is no showing that there's any  
11 aspect of this site that would prevent a sufficiently  
12 protective reactor from being built.

13 But, again, the real nub of the issue is  
14 that the NRC regulations establish the criteria for  
15 judging site suitability, and they are the dose at the  
16 LPZ boundary and the exclusion area boundary. And  
17 that's what an applicant must show, and that's what  
18 has been done in this case.

19 As far as -- there was a question about  
20 this being a contention of omission, and perhaps Mr.  
21 Lockbaum's affidavit is okay in that context. Even  
22 with a contention of omission, a Petitioner has to  
23 provide a basis to show that there is an omission and  
24 it's material, and that it should be looked into  
25 further. And, therefore, they have to show a non-

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1 compliance with the regulations. They've not done  
2 that here. And they have certainly not shown anything  
3 to indicate that this site is unsuitable.

4 CHAIRMAN BOLLWERK: All right. Is there  
5 anything from the Staff further?

6 MR. WEISMAN: The Staff would like to make  
7 two points. The first point is the Petitioners  
8 referenced the first sentence of the proposed  
9 contention, but that sentence merely recites the  
10 language in 52.17. Petitioners then went to a  
11 paragraph -- one paragraph in their proposed  
12 contentions that has a vague reference to site  
13 suitability.

14 There is no specific identification of  
15 anything wrong with the site in that paragraph, and  
16 the Staff doesn't believe that there's any such a  
17 reference in the remainder of the proposed -- the  
18 bases for the proposed contention.

19 Second, Petitioners assert that the  
20 Staff's and the Applicants' interpretation of the  
21 regulations doesn't make sense. However, upon  
22 examination of Section 100.21(c), it says that goes to  
23 site dispersion characteristics, and it requires that  
24 the site dispersion characteristics be such that the  
25 dose criteria for the EAB and the LPZ are established.

1           But that's not the only information you  
2 need. Site dispersion characteristics are not --  
3 that's not the only information you need to make that  
4 determination. You also need -- an applicant needs  
5 some kind of assumed release from the containment to  
6 make that determination, which the Applicants here  
7 have done through a plant parameters envelope. So  
8 they have their -- and that is required by  
9 Section 52.17. So they do require something  
10 different.

11           And as for the Petitioners' argument that  
12 Section 52.17 requires evaluation of the concerns they  
13 raised -- Judge Abramson, I believe you were asking  
14 about this point -- the Staff clearly reads the  
15 regulation. It says, "The components of the facility"  
16 -- that means the new facility -- "that bear on  
17 releases," that would go to the doses at the EPZ and  
18 the EP -- EPB and LPZ boundaries.

19           So the Staff can't -- does not see how  
20 that regulation could be read to encompass the  
21 Petitioners' asserted concern.

22           Thank you, Your Honor.

23           CHAIRMAN BOLLWERK: All right. Ms.  
24 Curran, you have the last word.

25           MS. CURRAN: Okay. Mr. Lewis said that

1 our concerns could be addressed by redesigning the  
2 proposed facility at the construction permit stage.

3 But it's my understanding of the process  
4 for approving these standardized designs that this  
5 happens in a rulemaking, and that if these  
6 Petitioners, for instance, were to come along in a  
7 construction permit proceeding and express the concern  
8 that we've raised in this contention, that the design  
9 of the proposed facility -- say, they picked a design  
10 -- that it would not be sufficient to protect, say,  
11 the control room if there were an accident at the  
12 existing reactor.

13 My understanding of the process is that  
14 we'd have to petition for a waiver of the regulations,  
15 because the approval of the reactor design is  
16 essentially a regulation.

17 Now, I may be wrong, but that's my  
18 understanding of how it works. So, in other words, we  
19 have no rights in that matter. It's really kind of a  
20 discretionary thing with the Commissioners, and I  
21 think it would go to the Commissioners as to whether  
22 to start a waiver proceeding.

23 So to say that this is something that can  
24 be addressed at the construction permit stage, I don't  
25 think that's really -- it's not -- it's accurate in a

1 sense that it can be, but in the -- in the sense that  
2 members of the public would have a right to demand  
3 that the issue be addressed, I think this is the place  
4 where we have actually a right to make that demand.  
5 I don't think that would come up in the same way in a  
6 construction permit proceeding.

7 I think I heard Mr. Weisman say that he  
8 thinks that these regulations only deal with accidents  
9 at the proposed reactor, and not at -- not with  
10 accidents at, say, the existing reactor. I can't find  
11 that -- I can't find a limitation like that in these  
12 regulations. It talks -- they talk generally about  
13 accidents.

14 So I would just ask that you look at the  
15 regulations with that in mind. There isn't anything  
16 -- a phrase in here that says "accident at the  
17 proposed reactor." It talks in general about  
18 accidents.

19 That's all I have.

20 CHAIRMAN BOLLWERK: All right. Any other  
21 Board questions in this connection? No?

22 All right. We've been going about a  
23 little over an hour at this point. Why don't we go  
24 ahead and take a break, and we'll come back at 10  
25 after.

1 (Whereupon, the proceedings in the  
2 foregoing matter went off the record at  
3 10:57 a.m. and went back on the record at  
4 11:10 a.m.)

5 CHAIRMAN BOLLWERK: Let me go back on the  
6 record just for an administrative announcement while  
7 everybody's still taking their seat. A question was  
8 asked during a break of me about when will the, I  
9 think it was, Grand Gulf contentions come up? And  
10 just so it's clear to those of you who are out there  
11 and don't have a schedule in front of you, a number of  
12 these contentions, in fact, the next one, for  
13 instance, we're having and the one we just heard  
14 argument on, related to all three proceedings, both  
15 Clinton and North Anna and Grand Gulf.

16 The third group of contentions we'll be  
17 hearing actually relate to North Anna and Grand Gulf  
18 to deal with the severe accident impacts. The fourth  
19 group is all three facilities dealing with the waste  
20 confidence. The fifth group is for Clinton. It deals  
21 with clean energy alternatives. Then the Lake Anna  
22 impacts is North Anna contention. That's number 6.  
23 Number 7, alternatives for Cooling Units 3 and 4,  
24 that's a North Anna contention. The next two after  
25 that, Number 8 and 9, as we've got them here, adverse

1 impacts on the minority and low-income community and  
2 also emergency planning deficiencies, are both Grand  
3 Gulf. And the last contention we have dealing with  
4 the Illinois state moratorium is a Clinton contention.

5 So, again, certainly the next several  
6 contentions we have will apply to at least two of the  
7 facilities and in a couple instances all three of  
8 them, just so those of you out there who don't have a  
9 schedule know what's going on.

10 The next contention we have, as I  
11 mentioned, deals with site suitability for below grade  
12 placement of a reactor containment. That's Clinton  
13 Site Safety Analysis Contention 2.2, North Anna Site  
14 Safety Analysis Contention 2.2 and Grand Gulf Site  
15 Safety Analysis Contention 2.2. And, Ms. Curran, I'll  
16 turn to you then.

17 MS. CURRAN: Okay. Before I begin, I  
18 would just like to take one moment and introduce a  
19 member of BREDL who's been able to come for the  
20 proceeding, and this Avaya Tio who is with a group  
21 called People's Alliance for Clean Energy, which is a  
22 chapter of BREDL. There were other people who would  
23 have liked to come but they had to work or it was too  
24 far for them to come, and I would just like to urge  
25 the Board at some point to hold a proceeding in each

1 community; because I think there quite a few people  
2 who would have been here today.

3 CHAIRMAN BOLLWERK: Okay. I've heard that  
4 from a number of different sources, and we're  
5 obviously very aware of that.

6 MS. CURRAN: Okay.

7 MR. LEWIS: Judge Bollwerk?

8 CHAIRMAN BOLLWERK: Yes.

9 MR. LEWIS: Ms. Lillian Cuoco, who's  
10 counsel for Dominion, has joined us.

11 CHAIRMAN BOLLWERK: All right.

12 MR. LEWIS: She's already made her notice  
13 of appearance in this proceeding.

14 CHAIRMAN BOLLWERK: All right. Thank you.  
15 All right. Then let's go ahead and turn to the  
16 contention dealing with site suitability for below  
17 grade placement of reactor containment. How much time  
18 do you want to save for rebuttal?

19 MS. CURRAN: I think this is 40 minutes  
20 total --

21 CHAIRMAN BOLLWERK: Yes.

22 MS. CURRAN: -- and I would take 20 for  
23 the presentation and 20 for rebuttal.

24 CHAIRMAN BOLLWERK: All right. And I  
25 should mention, depending on how long this will take,

1 we'll probably take a lunch break after this one is  
2 over. So for whatever that's worth for everyone, I  
3 throw that out.

4 MS. CURRAN: It's worth a lot.

5 CHAIRMAN BOLLWERK: All right.

6 MS. CURRAN: Okay. This contention,  
7 which, again, there are three virtually identical  
8 contentions for each proceeding, I think boils down to  
9 a question of how does one interpret 10 CFR Section  
10 100.21(f), which requires that site characteristics  
11 must be such that adequate security plans and measures  
12 can be developed.

13 The Applicants and the staff argue that  
14 our contention, which is that the ESP application  
15 should consider below grade construction of these  
16 facilities, especially the containment, their position  
17 is that this contention is without merit, largely  
18 because there is nothing in NRC regulations which  
19 requires below grade construction of nuclear plants.  
20 But the regulation doesn't say the considerations  
21 include whether security regulations will be met.

22 It's written in a way that seems to  
23 contemplate that security requirements may change, and  
24 in fact during the past several years since September  
25 11, we've seen some very significant changes in

1 security requirements for nuclear plants. And we've  
2 also seen the NRC undertake a thorough investigation  
3 of what are the vulnerabilities of nuclear plants, and  
4 I believe the NRC is still considering whether  
5 protection against aircraft impacts is something to be  
6 pursued. That was mentioned in the PFS case, which is  
7 cited in our reply.

8 In our view, if one is going to approve  
9 the suitability of a site for a new nuclear plant and  
10 this site approval could be in effect for the next 20  
11 years, it is reasonable and prudent to consider  
12 whether the site is suitable for below grade  
13 construction of the facility. It is a technology that  
14 has been considered for at least the last, I think  
15 it's 50 years when Edward Teller first broached this  
16 possibility.

17 I would like to address an argument that  
18 I don't think I addressed in my reply, which is the  
19 applicability of 10 CFR Section 50.13. This is the  
20 regulation that is a -- it's basically a companion to  
21 a D.C. Circuit case, Segal v. NRC, in which the  
22 Commission said that nuclear plants don't have to be  
23 designed to protect against enemy attack. The way  
24 that issue arose was during the Cold War, I think it  
25 was the Turkey Point Plant was being built, and the

1 question came up as to whether it should be designed  
2 to withstand an attack by a Cuban missile. And the  
3 D.C. Court of Appeals -- the D.C. Circuit of the Court  
4 of Appeals said, "That's really the responsibility of  
5 the defense establishment." And the Commission  
6 codified that finding in 10 CFR 50.13. The question  
7 is whether that regulation applies here, and we don't  
8 believe it does.

9 If you look at the rule that the  
10 Commission promulgated in 1994 for protection of  
11 nuclear plants against vehicle bombs -- and that can  
12 be found at 59 Federal Register 38,889, it was  
13 promulgated on August, 1994 -- the Commission makes a  
14 distinction between a domestic terrorist threat and  
15 threat from a foreign government. And I would refer  
16 you in particular to Page 38,893 where the Commission  
17 responded in that rulemaking to a comment by some  
18 nuclear industry representatives that this proposed  
19 vehicle bomb rule was precluded by 10 CFR 50.13.

20 The Commission went over the history of  
21 how 50.13 came to be promulgated and said, "The  
22 statement of considerations for 10 CFR 50.13 makes it  
23 clear that the scope of that regulation is to relieve  
24 applicants of the need to provide protective measure  
25 that are the assigned responsibility of the nation's

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1 defense establishment."

2 The Atomic Energy Commission recognized  
3 that it was not practical for the licensees of  
4 civilian nuclear power reactors to provide design  
5 features that could protect against the full range of  
6 the modern arsenal of weapons.

7 The statement concluded with the  
8 observation that, "Assessing whether another nation  
9 would use force against a nuclear power plant was  
10 speculative in the extreme and in any case would  
11 involve the use of sensitive information regarding  
12 both the capabilities of the United States defense  
13 establishment and diplomatic relations."

14 And then the Commission went on to  
15 distinguish that situation from the situation of a  
16 terrorist threat against a facility in the United  
17 States. For instance, the Commission said, "The  
18 participation or sponsorship of a foreign state in the  
19 use of an explosives-laden vehicle is not necessary.  
20 The vehicle explosives and know-how are all readily  
21 available in a purely domestic context. It is simply  
22 not the case that a vehicle bomb attack on a nuclear  
23 power plant would almost certainly represent an attack  
24 by an enemy of the United States within the meaning of  
25 that phrase."

1           And here I think the concern that the  
2 Commission has now is that the primary threat to  
3 nuclear power plants today is not from foreign  
4 governments. The Cold War has ended. The threat is  
5 from organizations that may be within the United  
6 States or outside the United States and have the  
7 capability to do massive damage to a nuclear power  
8 plant without any assistance from an official foreign  
9 government.

10           I think we've all probably read the front  
11 page story in the Washington Post a few days ago.  
12 This was a report by the staff of the September 11th  
13 Commission, which said that they have now found that  
14 al-Qaida had planned ten different airplane attacks on  
15 September 11, including two attacks on nuclear power  
16 plants, which they weren't able to identify, but  
17 apparently they are aware that there were two planned  
18 attacks on nuclear power plants. So we're talking  
19 about a threat in today's environment that is very  
20 unlike the threat that was considered in 10 CFR 50.13.

21           I would also refer you to a case from the  
22 Second Circuit, *Riverkeeper v. Samuel J. Collins*,  
23 which was reported at 359 F.3d 156 and was decided  
24 February 24, 2004. In that case, the Second Circuit  
25 considered the applicability of, I believe it was, the

1 holding in Segal v. NRC and said that the  
2 circumstances of that case are sufficiently different  
3 from the circumstances today that Segal is no longer  
4 a compelling precedent. And that is found at Page  
5 168, Note 14.

6 I don't think I have anything more on this  
7 contention at this point.

8 CHAIRMAN BOLLWERK: Questions? Go ahead.

9 JUDGE ABRAMSOM: Ms. Curran, help me  
10 understand what it is you'd like to have us do or what  
11 you'd like to have the Applicant do. They are, as I  
12 understand it, making an application for permission to  
13 build some undesignated reactor sites, and you're  
14 suggesting that that reactor should be built below  
15 grade. Would you have the Applicant investigate that?  
16 Would you have us mandate it? What is it you're  
17 after?

18 MS. CURRAN: Well, first, what we want you  
19 to do is to admit the contention, but what we'd like  
20 the Applicant to do is to evaluate -- or the  
21 Applicants in all three cases would be to evaluate the  
22 suitability of each site for below grade construction  
23 of the facility. It does not appear, although I think  
24 Exelon has done a certain amount of investigation, the  
25 other two have not looked into whether the issues

1 would be the groundwater, the geology, whether there's  
2 any limitations on this site to below grade placement.

3 JUDGE ABRAMSOM: But what's the context of  
4 our authority to require that?

5 MS. CURRAN: The authority is in 10 CFR  
6 100.21(f), which requires an evaluation of the  
7 suitability of the site so that adequate security  
8 plans and measures can be developed.

9 JUDGE ABRAMSOM: So you take the general  
10 requirement for security to give us authority to  
11 require that below grade containment be investigated.  
12 Is that where I'm going?

13 MS. CURRAN: Yes. It certainly is clear  
14 that under today's regulations there's no such  
15 requirement, but I think what it requires you to do is  
16 to make a determination that it is reasonably  
17 foreseeable and prudent to include this consideration  
18 among the site suitability considerations that would  
19 be relevant to security. I know the Commission has  
20 said on a number of occasions that security -- it's  
21 concept of what constitutes adequate security is  
22 evolving. It's changed a lot since September 11, and  
23 the Commission is still in the process of evaluating  
24 it. And here we are at a juncture where the  
25 Commission is now responsible for evaluating the

1        suitability of sites for new nuclear facilities, and  
2        it's our position that security considerations should  
3        be flexible enough to not just to focus on what  
4        requirements exist today but to also look at what kind  
5        of requirements the Commission is now considering and  
6        would be reasonably foreseeable and to evaluate  
7        whether the site is suitable for such requirements.

8                    JUDGE ABRAMSOM: Your point being that  
9        security considerations might in the future cause the  
10       Commission to mandate that plants be below grade and  
11       therefore at this juncture you would require every  
12       applicant for a new site to investigate suitability  
13       for below grade, whether or not that applicant at this  
14       point would choose to build below grade? Is that  
15       accurate?

16                   MS. CURRAN: Yes. I don't think the  
17       applicant's desires are as relevant as what's  
18       reasonably within the scope of security measures that  
19       the NRC is likely to consider in the next 20 years.  
20       And I'm not talking about might, I mean you used the  
21       word, "might." I think it's reasonable to forecast  
22       that this is going to be a relevant consideration in  
23       the future.

24                   This isn't speculation, and I think if you  
25       look at the reply that we submitted, in the PFS case,

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1 the Commission talked about its ongoing inquiry into  
2 vulnerability of nuclear facilities to airplane  
3 crashes. We have the recent news from the September  
4 11th Commission staff. These are all indicators that  
5 below grade placement of a nuclear plant is something  
6 that's reasonable to inquire into when one is looking  
7 at site suitability.

8 CHAIRMAN BOLLWERK: Do you have any  
9 questions?

10 JUDGE BARATTA: Your reference was it  
11 Exelon or Dominion? The Dominion response does  
12 specifically cite gas turbine modular high temperature  
13 gas reactors being below grade containment.

14 MS. CURRAN: Well, hold on just a minute.

15 JUDGE BARATTA: That's on Page 22 of their  
16 answers to the contention.

17 MS. CURRAN: Okay. When I read that I  
18 didn't see that Dominion had said, "We evaluated the  
19 suitability of this site." What Dominion said was  
20 that PPE, the plant parameters envelope, I think that  
21 is, encompasses a below grade containment design and  
22 bounds reactors with structures as deep as 140 feet.  
23 What I see Dominion saying is, "We have chosen at  
24 least one of our reactor designs could be built below  
25 grade," but it doesn't say, "We have evaluated the

1 suitability of this site for construction below  
2 grade." Now, maybe that will be corrected in this  
3 oral argument, but I didn't see anything from Dominion  
4 saying, "Here, look at our geological report. We've  
5 looked at this site, we've looked at the groundwater  
6 and the geology, and this site is okay for 140 feet  
7 below grade."

8 CHAIRMAN BOLLWERK: I have two questions.  
9 One, you mentioned the Commission several times. In  
10 all the cases up to this point that I'm aware of, the  
11 Commission -- and it's come up in a number of  
12 different instances, whether it's private fuel, some  
13 other cases dealing with things that were not,  
14 obviously, the spent fuel storage -- for instance --  
15 well, I'd say was, Diablo Canyon just came up on the  
16 PSF there, and that's on appeal in the 9th Circuit --  
17 the Commission has shown a reluctance to have this  
18 issue, these types of security issues litigated in  
19 adjudicatory proceedings up to this point. What,  
20 given that, do you suggest this Board do?

21 MS. CURRAN: Well, if you're concerned  
22 about the Commission's reluctance, then I would ask  
23 that you refer the issue to the Commission, because  
24 the question is what does the law require, in our  
25 view, and I certainly am familiar with the

1 Commission's reluctance to discuss these issues with  
2 the public, but we are continue to present these  
3 issues and ask for consideration, and we would simply  
4 ask that you present the issue to the commissioners if  
5 you believe they're the appropriate body to decide  
6 them.

7 CHAIRMAN BOLLWERK: I should say probably  
8 the word, "reluctance," is wrong. I mean the Board  
9 has made legal rulings, all the boards have made legal  
10 rulings, and the Commission has said those were the  
11 correct legal rulings.

12 Second question, you mentioned, I guess,  
13 in distinguishing the current situation from the Segal  
14 case and what it was intended to engender, and you  
15 talked about the question of truck bombs. What we're  
16 talking about here is taking a facility and, for  
17 instance, there's one case here we talked about  
18 dropping it 140 feet into the ground. Aren't we  
19 really getting back to talking about the types of  
20 threat that Segal was actually, at least in its  
21 broader sense, attacks by foreign governments or those  
22 that have the ability to render that kind of attack,  
23 someone that is very organized, not necessarily an  
24 individual truck bomber but someone that can put  
25 together a fairly complex sophisticated plan and do

1 some damage that way? Isn't that more of the Segal  
2 type case?

3 MS. CURRAN: Well, Segal was focused -- I  
4 guess there were several elements in Segal --

5 CHAIRMAN BOLLWERK: Just to interrupt,  
6 50.13 says, "foreign governments or persons," It  
7 isn't necessarily related only to foreign governments,  
8 but go ahead.

9 MS. CURRAN: Well, the fact is that as  
10 time goes by the domestic threat gets more and more  
11 significant, and the capability increases to do harm.  
12 And so at what point -- the question arises at what  
13 point does the vehicle bomb rule leave off and 10 CFR  
14 50.13 come into play? And in 10 CFR 50.13, as it's  
15 been interpreted by the Commission in a vehicle bomb  
16 rule, the major concern was attacks by foreign  
17 governments and that these were the response of the  
18 defense establishment, the Department of Defense, to  
19 defend against.

20 What we have here -- I mean we certainly  
21 see the Commission engaged in an effort to evaluate  
22 the adequacy or protective measures of nuclear  
23 facilities against terrorist attacks from within the  
24 United States. That is a major preoccupation of the  
25 Commission at the moment. They haven't handed that

1 over to the Defense Department and said, "That's your  
2 job, not ours." And until Congress tells the NRC,  
3 "This is going to be the Defense Department's  
4 responsibility and not yours," it's our view that the  
5 NRC has a responsibility to protect the public.

6 CHAIRMAN BOLLWERK: All right. Anything  
7 further by other Board members? All right. Then at  
8 this point, let me turn to the Applicant, and you are  
9 going to present the argument on this.

10 MS. SUTTON: Yes, Your Honor, and I would,  
11 as a matter of procedure, like to reserve five minutes  
12 for my fellow applicants to address some of the site-  
13 specific issues that have been raised here regarding  
14 below grade containment and any remaining time for  
15 rebuttal.

16 In both their pleadings and their argument  
17 today, Petitioners claim that the site safety analysis  
18 in these applications are inadequate because they do  
19 not evaluate the suitability of the site to locate the  
20 reactor containment below grade. And as you've heard  
21 here, Petitioners are really focused on their belief  
22 that below grade construction is advisable and  
23 appropriate, if not necessary, in order to maintain an  
24 adequate level of security in the post-9-11  
25 environment. In summary, this contention is baseless

1 and the reply has not remedied that fact, nor has the  
2 argument here today.

3 It's admissible for two primary reasons.  
4 First, it constitutes an impermissible challenge to  
5 NRC regulations and exceeds the scope of this  
6 proceeding, and this is contrary to 10 CFR 2.335,  
7 Subsection A. Second, it also fails to satisfy 10 CFR  
8 Section 2.309(f)(1)(vi), which requires citations to  
9 and disputes with particular statements in the  
10 application. As you're going to hear both from SRI  
11 and our other Applicants in this case, Petitioner's  
12 contention is factually incorrect and ignores the  
13 content of the various applications.

14 Let's begin with why it is an  
15 impermissible challenge to NRC regulations. There is  
16 no regulatory requirement for below grade construction  
17 of containments. Thus, the underlying presumption in  
18 the contention that an ESP application must analyze  
19 below grade construction to demonstrate that the site  
20 will support such construction is fundamentally  
21 flawed.

22 Now, we need to begin with 50.13. We've  
23 heard a lot of policy-related arguments here about  
24 this regulation. As an Applicant, we don't wear a  
25 policy hat. We look at the regulations, and as this

1 regulation stands today, it expressly states that an  
2 applicant for a license to construct or operate a  
3 nuclear power plant is not required to provide for  
4 design features to protect against possible terrorist  
5 attacks and sabotage by an enemy of the United States.

6 In their reply and again here today,  
7 Petitioners have argued that 50.13 does not apply, and  
8 they are mistaken. The NRC has not repealed this  
9 regulation, and, thus, it has not, as Petitioners  
10 claim in their reply for Grand Gulf, completely  
11 changed its position on this point.

12 In addition, Petitioners, in their reply,  
13 cite the PFS decision and that does not stand for the  
14 proposition that security issues related to sabotage  
15 are now open to litigation under the Atomic Energy Act  
16 in these licensing cases. As the Petitioners  
17 themselves point out in their reply brief, the NRC is  
18 evaluating the issue, they're studying it at present,  
19 and if ongoing research and security reviews recommend  
20 further security enhancements beyond the orders,  
21 beyond regulations, whatever, the NRC will take  
22 appropriate action. However, that has not taken place  
23 to date. Fifty.13 has not been repealed by the NRC,  
24 and thus it still carries the full force and effect of  
25 law in this proceeding.

1           In addition, the Commission has approved  
2 by rulemaking three advanced reactor designs that do  
3 not require below grade construction. And, again,  
4 I'll point to 10 CFR Part 52, Appendices A, B and C.  
5 These regulations and rulemakings have not been  
6 repealed either.

7           Next, Petitioners move on to Section  
8 100.21(f) in support of this contention. This section  
9 does not require the Applicants to evaluate the site  
10 for possible below grade construction. It requires,  
11 as Petitioners have cited, that site characteristics  
12 must be such that adequate security plans and measures  
13 can be developed. NRC rules obviously are the  
14 framework for judging the adequacy of any such  
15 security plans or measures in the future, and, thus,  
16 in answer to Petitioner's question in its reply at  
17 Page 7 in the Grand Gulf proceeding, no, Section  
18 100.21(f) does not reasonably encompass below grade  
19 construction.

20           At bottom, with respect to Section  
21 100.21(f), Petitioners have not provided any  
22 information or legal argument to demonstrate the  
23 existence of a genuine dispute with regard to whether  
24 site characteristics at any of the three sites at  
25 issue here today preclude the development of adequate

1 security plans and measures. Thus, their contention  
2 does not meet muster, and this is contrary to  
3 2.309(f)(1)(vi). Rather, at either the CP or COL  
4 stage, an applicant would compare a specific design  
5 requirement, as they would exist at the time, with the  
6 site characteristics that are going to be identified  
7 as part of the ESP process.

8 Next, still on regulatory interpretation  
9 front, Petitioners claim that below grade construction  
10 is advisable and appropriate, and this must be viewed  
11 as an impermissible challenge to NRC regulations in  
12 Part 73. Specifically, Section 73.55 houses the  
13 regulatory requirements for physical protection of  
14 nuclear reactors against radiological sabotage,  
15 including possible acts of terrorism. Specifically,  
16 Section 73.55(a) states that the physical protection  
17 system shall be designed to protect against the design  
18 basis threat of radiological sabotage, as stated in  
19 Section 73.1(a).

20 The DBT, or the design basis threat, as  
21 defined in Section 73.1(a), does not include any  
22 attacks by commercial aircraft. Furthermore, Section  
23 73.55(b) through (h) provides specific on-site  
24 physical protection system and security organization  
25 requirements that are necessary to protect against the

1 design basis threat, and none of these security  
2 requirements require below grade construction.

3 Now, we've heard a lot here about the  
4 future and perhaps recognizing that these various  
5 existing NRC regulations do not require below grade  
6 construction. The Petitioner's reply brief leaves the  
7 here and now, it paints a vision of the future, and it  
8 begins to speculate about the nature of NRC  
9 regulations as they will exist in the future. And, at  
10 worst, they then attempt to impose these hypothetical  
11 regulatory requirements on ESP applicants here and now  
12 today.

13 In this regard, the reply argues that the  
14 threat environment will become more severe and that  
15 governing regulations will be changed. Apart from the  
16 fact that this is sheer speculation, we could as  
17 easily argue here and now that the threat environment  
18 will be relaxed, nothing in NRC regulations or  
19 adjudicatory precedent requires applicants to assume  
20 prospective regulatory changes, much less attempt to  
21 comply with them, and that includes security changes.

22 On this point as well, in her argument  
23 here today, Ms. Curran mentioned the citation to  
24 Edward Teller's 1953 letter to the Joint Committee on  
25 Atomic Energy. We agree with the staff that it

1 provides an insufficient basis for this contention.  
2 It was written more than 50 years ago. It is dated,  
3 and it's not relevant to the security and terrorism-  
4 related issues that have been raised by the  
5 Petitioners.

6 Finally, turning to the factual  
7 inadequacies of the contention, with respect to Grand  
8 Gulf, the Petitioners claim, and I quote their  
9 contentions at 11 that, "There is no indication in the  
10 ESP application that the Applicant has considered the  
11 suitability of the site for below grade construction  
12 of the reactor containment," and this is not true.  
13 Below grade site characteristics are evaluated in  
14 Sections 2.4, which is entitled, "Hydrologic  
15 Engineering," and Section 2.5, entitled, "Geology,  
16 Seismology and Geotechnical Engineering," of the  
17 application.

18 And in this respect, the application  
19 evaluates a range of site characteristics at a variety  
20 of depths below grade. We direct the Board's in this  
21 regard, for example, to Figures 2.5-6, 2.5-11 and 2.5-  
22 12, Table 2.5-23 and 2.5-24, as well as Section  
23 2.5.2.3 of the application. And these characteristics  
24 that we're citing to you define part of the envelope  
25 of characteristics that will be considered at the

1 design stage when a specific design and location are  
2 selected and subjected then to further evaluation.

3 I'll now turn to counsel for Exelon and  
4 Dominion with respect to their applications.

5 MR. LEWIS: Yes. I have on point on the  
6 Dominion application. The Petitioners asserted in  
7 their reply to our answer on Page 11 that an NRC staff  
8 memorandum indicated that the geologic exploration had  
9 been limited to the area where the cooling towers will  
10 be built, and I wanted to correct that statement. The  
11 NRC staff memo which is cited, and there's an  
12 accession number, in no way says that our  
13 investigation was limited to that area. It says that  
14 our site investigation included the area of the  
15 cooling towers, which is very different. The site  
16 safety analysis report that is part of our application  
17 includes a figure, which is Figure 2.5-60, that shows  
18 where those subsurface borings were and clearly shows  
19 that the geologic investigation included the area  
20 where safety-related structures will be located. So  
21 as a factual matter specific to Dominion's  
22 application, the cited memorandum that is in  
23 Petitioner's reply is mischaracterized, and the  
24 application clearly shows that we did look at the area  
25 where safety-related structures would be located.

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1 MR. FRANZ: With respect to the Exelon  
2 application, we did look at below ground placement of  
3 the basement up to 140 feet below the surface of the  
4 ground. We looked at this from the perspective of  
5 hydrologic engineering and the subsurface conditions.  
6 And I'd refer the Board particularly to Sections  
7 2.4.13.3, the Site Safety Analysis Report, and Section  
8 2.5.4.12 of that report.

9 The Petitioners have not submitted a reply  
10 in response to our arguments here. They have not  
11 identified any feature of our application where we  
12 discuss below ground placement that is not adequate,  
13 and, therefore, they have not raised any material  
14 issue of fact and have not complied with Section  
15 2.309. And, therefore, just on the factual issues  
16 alone, let alone the legal issues mentioned by Ms.  
17 Sutton, the contention should be denied with respect  
18 to the Exelon application.

19 CHAIRMAN BOLLWERK: Anything further on  
20 your argument then?

21 MS. SUTTON: No, Your Honor?

22 CHAIRMAN BOLLWERK: Any questions?

23 JUDGE BARATTA: I just want to get a  
24 clarification on the question that I raised to  
25 Petitioners with respect to the Dominion -- that what

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1 I heard for Exelon, is that consistent with what  
2 Dominion did as well?

3 MR. LEWIS: Dominion's application did  
4 look at borings down to bedrock. There are two  
5 figures in the site safety analysis report. They are  
6 2.5-57 and 2.5-58 that show the profile of the borings  
7 and show the borings in the safety-related areas as  
8 going down below 140 feet and therefore show that we  
9 have data, both geological and hydrological data for  
10 the full depth fitting the profile of the PPE.

11 JUDGE BARATTA: And could I ask the same  
12 question of SERI?

13 MS. SUTTON: Yes. In our case, Your  
14 Honor, unlike the other two applicants that did  
15 identify a particular figure below grade, i.e. 140  
16 feet, in our case, we gathered the various data and  
17 have evaluated them at a range of depths. However, we  
18 have not put all of that together to then equal a  
19 particular maximum depth for the basement. That would  
20 be done at the point in time when a particular design  
21 is selected in conjunction with the absolute  
22 particular site.

23 JUDGE BARATTA: Thank you.

24 CHAIRMAN BOLLWERK: Anything further? I  
25 just had one question. As Ms. Curran pointed out, I

1 mean the Riverkeeper case was decided recently in the  
2 Second Circuit, raised some significant questions  
3 about Segal. Again, we report to the Commission and  
4 the Commission is the appellate body that oversees  
5 what this Board does. Having said that, do we have  
6 any latitude here in terms of sending this back to the  
7 Commission?

8 MS. SUTTON: You always have latitude to  
9 the send it to the Commission. However, as an  
10 applicant, and, again, not as a matter of policy as to  
11 what the NRC should be doing, a couple of factual  
12 issues. We agree that Segal at the time, the nature  
13 of the threat, albeit communism, was different from  
14 terrorism, it still was a threat, and it was dealt  
15 with as such. And applicants for both construction  
16 and operating licenses were not required to design  
17 facilities to protect against that threat. I would  
18 argue as a matter of fact that it has not been  
19 demonstrated that that has materially changed in the  
20 current threat environment. However, it is clearly  
21 within your discretion to do whatever needs to be  
22 done. Again, this argument is coming from the  
23 viewpoint of an applicant as opposed to a policy  
24 maker.

25 CHAIRMAN BOLLWERK: All right. Thank you.

1 We turn then to the staff if there are no other  
2 questions. Staff then, please.

3 MS. HODGDON: Yes. Just to review what  
4 the staff did for a couple of sentences, the staff's  
5 opposition to Petitioner's Contention 2.2, as  
6 proposed, was based primarily on that contention being  
7 outside the scope of the proceeding and that the  
8 contention focuses on design issues, not site  
9 suitability issues and that there's no regulatory  
10 requirement that ESP applications include designs with  
11 below grade containments.

12 Also, the contention does not present a  
13 genuine issue of material fact and that all three  
14 applications did in fact encompass below grade  
15 containment, although they were not required to do so.

16 So the Petitioners filed two replies, one  
17 in North Anna, the other in Grand Gulf. In their  
18 replies, they address two points, both of which we  
19 will address here, and also their argument today. One  
20 of these arguments we think improves their position  
21 with regard to the admissibility of their contention.  
22 They argue that 10 CFR Section 100.21(f), which says  
23 that site characteristics must be such that adequate  
24 security plans and measures can be developed, raises  
25 the question of whether adequate plans include below

1 grade containment. And they submit that they do in  
2 fact -- that they would not be adequate except for  
3 their including below grade containment.

4 And beyond that being an attack on the  
5 regulations, I will say that their citation to Duke  
6 Energy Corporation at Catawba Nuclear Station Units 1  
7 and 2, CLI-04-06, that their reliance on support there  
8 is misplaced, as the case really does not help them.  
9 There the Commission denied a request from an  
10 intervenor group for security plans -- security  
11 orders, excuse me, on the basis of need-to-know and  
12 said citing a PFS case, PFS LBP 03-557 NRC 233, that  
13 license applications are measured against regulations,  
14 not against orders.

15 And so even though the Intervenors -- the  
16 Petitioners, excuse me, Petitioners here say that the  
17 Commission in Duke Energy Corporation -- that's the  
18 case that they cite, Catawba Nuclear Station and so  
19 forth -- they said the Commission observed that the  
20 concept of what constitutes adequate security is  
21 subject to change depending on the updated assessments  
22 of the terrorist threat. The fact is the Commission  
23 did not say that, that what constitutes adequate  
24 security -- what they're trying to do here is to  
25 construe that Part 100.21(f), but what the Commission

1 said there was that orders do not impose immutable  
2 requirements that are subject to change.

3 And they also said that the current  
4 proceeding has nothing to do with the NRC's post-  
5 September 11 general security orders. That is true  
6 here as well. This proceeding has absolutely nothing  
7 to do with the post-September 11 general security  
8 orders. It only has to do with the applicable  
9 regulations, and as all the Applicants and the staff  
10 said in their answers, the regulations pursuant to --  
11 invoked by Part 100.21(f) are the regulations in 10  
12 CFR Section 73.55, and there are no other regulations  
13 that are applicable.

14 There might be some that -- those are the  
15 directly applicable regulations. And, certainly,  
16 those orders do not even run to these Applicants. Of  
17 course, as licensees, they receive those orders, but  
18 as Applicants, they do not. Applications are -- and  
19 the Commission has said this in other places as well  
20 -- are to be judged entirely by the regulations, the  
21 applicable regulations.

22 The other argument that Petitioners make  
23 here today and in their reply brief concerns  
24 Dominion's evaluation of the North Anna site for below  
25 grade construction, and that was cited by Licensee's

1 counsel. We also address that, and I only want to add  
2 to what counsel said, which was entirely correct, that  
3 the memorandum that's cited does not say that  
4 evaluation was limited to a cooling tower site but  
5 instead said that it included it, and it goes on to  
6 speak about the drill holes at the site the staff  
7 observed at its site visit in December of 2002. And  
8 then those are all listed there, and the memorandum is  
9 quite specific about that.

10 So the Petitioners are mistaken when they  
11 say that the only drilling that was done was for the  
12 cooling tower site. It's quite clear from the  
13 application that other drilling was done.

14 I heard Dominion's counsel speak about  
15 these figures, and I think I looked at most of them.  
16 They're very hard to read because they're so small,  
17 but I had several in addition to what they argued,  
18 which show elevations, which are somewhat easier to  
19 read because you can see what the borehole is and how  
20 deep it goes and where it is. So I would cite Figure  
21 2.5-57 subsurface profile A, a-prime and Figure 2.5-58  
22 subsurface profile B, b-prime. And those elevations  
23 make clear that the drilling was to 170 feet, which  
24 would accommodate below grade containment.

25 As we said, because they did in fact

1 investigate those sites for below grade containment,  
2 although not required to do so, there is no  
3 controversy here between the Petitioners and the  
4 Applicants regarding any -- there's no issue of --  
5 genuine issue of material fact. The fact is they did  
6 do the evaluations that the Petitioners are seeking.

7 Lastly, I would address the question that  
8 was asked regarding the applicability of 50.13. The  
9 staff submits that this contention, as we've already  
10 stated, is inadmissible on a number of grounds for  
11 compelling reasons other than 50.13. And that is, as  
12 we've said, below grade construction is not a  
13 regulatory requirement and insisting that it is is an  
14 impermissible attack on the regulations in Part 52  
15 that reflect Commission approval of advanced reactor  
16 designs that cannot employ below grade containment.  
17 The plant parameter envelope used in the applications  
18 do in fact encompass reactors with below grade  
19 containment. And so there's a genuine issue of all of  
20 that.

21 And the factual assertions by the  
22 Petitioners regarding a new generation of reactors  
23 having a less robust containment reflect just the  
24 opposite of what they say it reflects, and that is on  
25 the facts that they presented. Actually, that's in a

1 footnote that is 2.2, but it seems in some ways that  
2 they might have meant it to go with 2.1 because it  
3 says that they mention three current reactors and say  
4 that their containment wall is 2.5 feet thick, and  
5 they say that the containment for the AP-600 is three  
6 feet. However, that's based on something that  
7 somebody in the staff said to Paul Gunter. However,  
8 the text of the petition talks about AP-1000, so it  
9 was apparently AP-1000 they were talking about, I  
10 don't know. But in any event, based on the facts as  
11 they claim them, there's nothing there.

12 But getting back to 50.13, as it's been  
13 argued here today, it's directed to design features or  
14 other measures directly connected with the protection  
15 of the facility against the effects of certain  
16 attacks. And it talks about applicants for  
17 construction and operation. Since the proceeding here  
18 relates only to site suitability issues that are  
19 pertinent to issuing an early site permit, 50.13 is  
20 not applicable here.

21 Fifty point 13 states that applicants are  
22 not required to provide for design features or other  
23 measures for the specific purpose of protecting  
24 against certain attacks. Fifty point 13 may come into  
25 play at the COL stage with respect to site suitability

1 issues, which are the subject of this early site  
2 permit licensing. Fifty point 13 is not applicable.

3 At this stage of the Part 52 process, that  
4 is siting, Part 100 reflects the pertinent  
5 requirements regarding security. Specifically, and  
6 I've already quoted that, it says that site  
7 characteristics must be such that adequate security  
8 plans can be developed. You can ask what are the  
9 adequate security plans and measures here. As I think  
10 we've already mentioned, the adequacy of the security  
11 plan is measured against 10 CFR 73.55. Therefore,  
12 there's no basis in the regulations to support the  
13 assertion in the contention that the Applicants must  
14 protect against 9-11-type attacks.

15 CHAIRMAN BOLLWERK: All right. Any  
16 questions from the Board? Just a -- you indicated, I  
17 guess, whether any orders had been imposed on other  
18 licensees that they wouldn't apply to any of these  
19 Applicants, but I take it if they then became a  
20 licensee, then the theory of those orders would be  
21 imposed on them, more than likely.

22 MS. HODGDON: Part of that decision that  
23 Petitioners liked was the part that said that orders  
24 are immutable. And so they're quite correct in saying  
25 that we have no reason to believe that orders would be

1 the same 20 years from now. But if they did happen to  
2 be the same or they did happen to impose orders and  
3 these Applicants became licensees, then orders, of  
4 course, they might not be like these orders, but  
5 orders imposed on them. However, this type of change  
6 requirement, below grade placement, is not likely --  
7 it's not the kind of thing that is posed by order.

8 CHAIRMAN BOLLWERK: And those orders are  
9 subject to a hearing request; is that correct?

10 MS. HODGDON: Those orders are subject to  
11 a hearing request.

12 CHAIRMAN BOLLWERK: All right. Anything  
13 else from any members of the Board?

14 All right. Ms. Curran?

15 MS. CURRAN: Okay. Maybe I'll start with  
16 the last thing that we talked about. If you read  
17 CLI0406, and it's actually on Page 10 -- I gave you  
18 the wrong cite, it's Page 10, not Page 9 -- the  
19 language we were relying on is a sentence that says,  
20 "Indeed, those orders," i.e. the enforcement orders of  
21 the spring of 2003, "do not impose immutable  
22 requirements but are subject to change depending on  
23 updated assessments of the terrorist threat." And  
24 that's the -- it's the last part of that sentence that  
25 we're relying on.

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1           The Commission is constantly reevaluating  
2 the nature of the terrorist threat, and if you -- I  
3 didn't bring the briefs with me, but if you look at  
4 the Commission's briefs in Public Citizen v. NRC, the  
5 case that's now pending in the D.C. Circuit, the  
6 Commission says, "We like to proceed by using  
7 enforcement orders because we can be more flexible  
8 that way." We're really not that concerned here with  
9 what is the process by which the Commission updates  
10 its security requirements. We are concerned with the  
11 content of those security requirements. Whether  
12 they're imposed by order or regulation, the fact of  
13 the matter is that the Commission is in the process of  
14 substantially revising its concept of what constitutes  
15 a viable security threat against nuclear power plants.  
16 I don't think anybody can dispute that.

17           I think I heard somebody -- I think it was  
18 you, Judge Bollwerk, who asked -- I just want to clear  
19 it up -- are enforcement orders something that we  
20 could request a hearing on? I don't believe so. And  
21 the authority for that is Balotti v. NRC, and I've  
22 also seen Balotti cited by the NRC recently. In  
23 Balotti, the NRC basically said in an enforcement  
24 proceeding an intervenor group like the Petitioners  
25 here wouldn't have standing to contest the adequacy of

1 the enforcement order. It benefits an intervenor  
2 group to have additional enforcement beyond what's  
3 required by the regulations, so one couldn't challenge  
4 the adequacy. I just want to clear that up in case  
5 that comes into your decision making.

6 I'd also like to talk a little bit about  
7 whether each of these individual licensees has in fact  
8 evaluated the suitability of their sites for below  
9 grade construction. I don't think so. I can't find  
10 any place in any of these applications where the  
11 Applicant specifically says this. What I would expect  
12 to see is for the Applicant to say, "Here are the  
13 factors that affect the suitability of a site for  
14 below grade construction: Seismic, groundwater,  
15 whether material can leak out of the plant and whether  
16 material can leak into the plant."

17 Now, I think we've heard some citations  
18 here to places where conditions below the surface of  
19 the ground were mentioned, and I think in Exelon's  
20 application there's a very, very brief amount of  
21 discussion of below grade placement of a reactor, down  
22 to 140 feet, but even in that application there's  
23 nothing that says, "We've taken a look at the site  
24 suitability -- the suitability of this site for all  
25 factors that are relevant to below grade

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1 construction."

2 I think I heard Ms. Sutton say that you  
3 can find some tables and some figures in the Grand  
4 Gulf application, but I looked in the narrative  
5 section of Section 2.4 and Section 2.5, which is what  
6 was cited by SERI in the response they made to our  
7 contention, and I couldn't find anything that said,  
8 "We've looked at the suitability of this site for  
9 below grade construction." I think they happened to  
10 mention some factors that might be relevant, but  
11 that's not what we're looking for here.

12 And I think I've already discussed the way  
13 Dominion described its application was that it had  
14 chosen designs that could be built down to 140 feet  
15 below grade. Now, Dominion says that it has analyzed  
16 the suitability of the site, and we would just  
17 continue to rely on the correspondence that we cited  
18 in our reply, which is the correspondence from the NRC  
19 staff regarding the nature of their suitability of  
20 conditions underground. our reading of that  
21 memorandum was that the NRC staff thought that the  
22 investigation was limited to the siting of the cooling  
23 towers. It didn't go into the siting of the safety  
24 features below grade. I think you'll just have to  
25 read that correspondence and judge it for yourself.

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1 I believe Ms. Sutton also argued that the  
2 Applicant in determining what security measures are  
3 relevant under Section 100.21(f) is entitled to look  
4 to the existing regulations to determine what would be  
5 the security requirements that would apply. I think  
6 if it had been ten years ago, that might be a  
7 reasonable statement, but we are now in a very  
8 different era. We are in the post-September 11 era  
9 where the security of nuclear plants and other nuclear  
10 facilities has been one of the primary concerns of the  
11 NRC. Huge amounts of resources are not being devoted  
12 to examining the nature of the security threat, the  
13 vulnerability of these facilities to that threat and  
14 what needs to be done. The regulation is written in  
15 a way that is not just restricted to what security  
16 regulations are on the books now, but seems to  
17 contemplate that the concept of security may change.

18 And what we're asking you to do is to take  
19 into consideration the fact that that concept is  
20 changing, that it remains open-ended and that in fact  
21 the Commission is looking at the very issues that we  
22 would like to be considered with respect to below  
23 grade placement, which is the vulnerability of nuclear  
24 reactors to attack by aircraft. And that's all I  
25 have.

1 CHAIRMAN BOLLWERK: All right. Let me  
2 just find out if anyone has anything further on this?  
3 No? All right. Any Board questions?

4 MS. HODGDON: May I?

5 CHAIRMAN BOLLWERK: All right.

6 MS. HODGDON: Regarding hearings on  
7 orders, the licensee may ask for a hearing on an  
8 order, and a petitioner may intervene. However,  
9 Balotti does control as regards to the scope. The  
10 petitioner cannot ask that the orders go beyond what  
11 they do in the order. The Commission addressed this  
12 recently in Main Yankee, I don't have the cite, but  
13 Balotti still does control. So, yes, but petitioners  
14 have not -- Balotti still controls as regards to  
15 scope.

16 Also, just to address a minor point on the  
17 staff memo about their site visit, it does say on  
18 December 11 and 12 members of NRR and Region 2 toured  
19 the locations where nine observation wells and seven  
20 boreholes were drilled within the ESP boundary, and so  
21 that clearly is not the cooling towers, and that memo  
22 can only be read that way and not the way that the  
23 Petitioners read it.

24 CHAIRMAN BOLLWERK: All right. Ms.  
25 Curran, do you want to say anything about either of

1 those points?

2 MS. CURRAN: I don't have the memo in  
3 front of me, so I'll just have to -- I don't think we  
4 would have cited that memo unless we saw language in  
5 there indicating there was a limitation on that below  
6 grade investigation, and we would continue to rely on  
7 it.

8 MR. LEWIS: Judge Bollwerk, I have one  
9 copy of the memo. I'm glad to give it to Ms. Curran  
10 if she agrees it's the memo. If it's convenient to  
11 you, we could give it to you so you don't have to look  
12 it up or bind it into the record.

13 CHAIRMAN BOLLWERK: I've probably got it  
14 here somewhere.

15 MR. LEWIS: Okay.

16 CHAIRMAN BOLLWERK: All right. Judge  
17 Baratta?

18 JUDGE BARATTA: Yes. Something that you  
19 said concerning use of the site parameter envelope  
20 that's in the early site permitting process, and I'm  
21 probably going to show my ignorance of the early site  
22 permitting process in this statement, but I thought  
23 from seeing the regulations that one takes that plant  
24 parameter envelope and the says, "Okay, whatever is  
25 specified in there the site has to be consistent or

1 suitable for that." Is that not the case?

2 MS. CURRAN: Well, all I saw -- and I'm  
3 talking about the response that Dominion filed to our  
4 contentions in the first instance -- that response  
5 said the plant parameters envelope for at least -- I  
6 think it was two of the reactors that are being  
7 considered, encompasses construction down to 140 feet  
8 below grade. But then the other part of the analysis  
9 would be an evaluation of the site as to whether this  
10 was a site where you could do that. They picked a  
11 plant that could be built 140 feet below grade, but,  
12 as far as I could tell, they didn't evaluate the site  
13 to see if you could do it at that site. Is that -- in  
14 other words, it's theoretical whether it -- it remains  
15 theoretical whether you could actually build it at  
16 that particular site.

17 JUDGE BARATTA: Well, that goes to the  
18 second question, which it appears that the regulations  
19 provide for a somewhat iterative process in that if  
20 you look at 52.79 where it talks about the application  
21 for construction and operating license, that it  
22 recognizes that there are conditional things that may  
23 come up and that there is a statement, at least with  
24 respect to environmental issues, where it says, "And  
25 to resolve any insignificant environmental issues not

1 considered in previous proceedings on the site or the  
2 design."

3 And I got the impression from reading that  
4 52.79(a)(1) that the regulations do allow for an  
5 evolution of both the regulations and requirements  
6 over time and that these issues could be revisited if  
7 they had changed. And that would seem to be,  
8 therefore, consistent with changes regulations which  
9 would allow then for the types of issues, if they  
10 become regulation, to be brought up at a later time.

11 MS. CURRAN: Well, to me, what it looks  
12 like is when you get to this point of a combined  
13 license application, if something hasn't come up  
14 earlier, then it's appropriate to bring it up there.  
15 But what we're relying on is a regulation that -- it's  
16 in Part 100 that it applies at the time of siting. It  
17 applies at the ESP stage. If you tell us that our  
18 concern doesn't arise until the construction permit  
19 stage, then maybe there's no harm to us. One of our  
20 concerns in this proceeding is that if we don't raise  
21 issues now, we don't want to be foreclosed later on  
22 from raising them because we could have raised them  
23 here.

24 So if you're going to say to us, "Well,  
25 this should be considered at the construction permit

1 stage," frankly, I don't think it's very prudent, it  
2 doesn't really comport with my understanding of the  
3 purpose of these siting requirements, which is to  
4 decide early on is this really going to work, but on  
5 the other hand, if we're not foreclosed from raising  
6 the issue, in general, because it's only a question of  
7 timing, I'm not sure that that's a significant problem  
8 for us.

9 JUDGE ABRAMSOM: I'd like to ask you a  
10 question about how you perceive the process working  
11 when an applicant looks at a site with no particular  
12 choice of a plant and what we've heard from the  
13 Applicants is that they've done -- they've sunk  
14 boreholes down well past 140 feet, at least a couple  
15 of them, so they've investigated the condition, the  
16 subsurface conditions. How would you see an applicant  
17 proceeding once he selects a plant?

18 I mean certainly they need to know the  
19 conditions before they can select a plant that would  
20 work there. Would you then expect if they were to  
21 decide to build below grade that they would  
22 accommodate those conditions or would you expect that  
23 those conditions would prohibit building below grade?  
24 How do you see this, setting aside earthquake kinds of  
25 conditions and looking at geology and hydrology?

1 MS. CURRAN: I'm sorry, I'm not sure I  
2 understand your question.

3 JUDGE ABRAMSOM: Applicants have tried to  
4 characterize the below grade conditions by drilling  
5 and other investigations. When they're ready to build  
6 a plant and select a particular plant to go on their  
7 site, what would you foresee the process to be?

8 MS. CURRAN: Well, before there was an  
9 early site permit process, I would have thought all of  
10 this happened at the construction permit stage. I  
11 think this early site permit process is a strange  
12 beet, frankly. I don't really -- I don't find it  
13 internally consistent, because there's nothing really  
14 happening, and I'm used to these processes being done  
15 when something's actually happening. And all that's  
16 being done is that a site is being set aside to build  
17 a nuclear plant someday, maybe. But I'm reading the  
18 regulations that I'm trying to figure out what does  
19 the NRC want to happen now?

20 JUDGE ABRAMSOM: Well, let's ask the  
21 staff, because I think they addressed this a little  
22 bit earlier. Can staff advise us or repeat what they  
23 said earlier about what things get decided now and  
24 what things get decided later at the COL or the design  
25 stages? I don't need you to give me a long list, but

1 you said something earlier about certain things that  
2 aren't addressed now will be addressed at one of those  
3 stages, and I'm not sure I have that right in front of  
4 me, and it may not have been in connection with this  
5 piece, it might have been in connection with the  
6 earlier pieces.

7 MS. HODGDON: Both Mr. Weisman and I  
8 addressed the scope on early site permitting, and so  
9 it may have been on 2.1 that you heard -- but I think  
10 I heard it, in any event. What we do now is only site  
11 suitability issues and not design issues.

12 JUDGE ABRAMSOM: So in the staff's view,  
13 if the applicant has only investigated a subsurface  
14 condition but has not come in with a design that would  
15 place its plant below grade, the below grade-related  
16 matters would be dealt with later. And would the  
17 petitioners have an opportunity to get involved at  
18 that level?

19 MS. HODGDON: Let me confer with Mr.  
20 Weisman for a minute.

21 CHAIRMAN BOLLWERK: There's a caveat to  
22 that which is putting aside the question of 50.13 or  
23 whatever might otherwise preclude --

24 JUDGE ABRAMSOM: Yes, right. Right.

25 CHAIRMAN BOLLWERK: -- this from being as

1 a --

2 MS. HODGDON: If the design certification  
3 -- if it's dealt with in the design certification,  
4 then it's foreclosed for litigation in the COL.

5 JUDGE ABRAMSOM: Okay. So would -- and I  
6 haven't been involved in design certification, but  
7 would the characteristics of a below grade containment  
8 be dealt with in design certification?

9 MS. HODGDON: In one of the -- in two of  
10 the advance reactor designs, which are not design  
11 certifications, they've not yet been certified, the  
12 GTMHR, the gas turbine modular helium reactor, and the  
13 PBMR, the pebble bed modular reactor, both of those  
14 are below grade. The pebble bed just partially below  
15 grade, the other entirely below grade. And, yes, they  
16 would. They have the equivalent of an FSAR as part of  
17 their certification.

18 JUDGE ABRAMSOM: So those plants have been  
19 designed to be below grade, and that part of the  
20 design has been looked at. So how would that  
21 certification interact with the subsurface  
22 investigation that the Applicants have done? In other  
23 words, the Applicants have determined the hydrology  
24 and geology and earthquake load stability of these  
25 sites down to -- let's suppose they've done it down to

1 a depth that would accommodate either of those two  
2 designs. How would the fact that they have been  
3 certified for below grade placement interact with the  
4 actual choice to put them below grade and the data  
5 that the Applicants have gathered on the subsurface  
6 conditions?

7 MS. HODGDON: The memo that we were  
8 talking about before addresses that somewhat in that  
9 it says with our cooling tower sites we'll have to do  
10 more because we might not choose a design that has  
11 cooling towers. In other words, the GTMHR doesn't  
12 need cooling towers; therefore, you wouldn't have to  
13 do anymore. And so otherwise there would be more site  
14 work done --

15 JUDGE ABRAMSOM: I'm sorry, I'm not --  
16 perhaps not asking this clearly. Suppose they decided  
17 to build a GTMHR on Clinton or Grand Gulf site, or  
18 North Anna, for that matter. How would the staff look  
19 at the subsurface investigations that these Applicants  
20 have done and use that information to decide whether  
21 actual physical placement of this type reactor would  
22 be acceptable? And would there be an opportunity for  
23 the Petitioners to get involved or is it purely a  
24 technical decision?

25 MS. HODGDON: I'm conferring with Mr.

1 Weisman.

2 JUDGE ABRAMSOM: Mr. Weisman, you can  
3 address this directly if you like.

4 MS. HODGDON: Well, I'll try it, and I may  
5 need some help from Mr. Weisman who is more  
6 knowledgeable of this. Early site permit --

7 JUDGE ABRAMSOM: Are you just reading what  
8 Mr. Weisman prepared? Why don't we let him address  
9 it.

10 MS. HODGDON: Mr. weisman will address it.  
11 As a matter of fact, I can't read --

12 (Laughter.)

13 MS. WEISMAN: I'm sorry, Your Honor. We  
14 didn't want to play tag team, that was all. I think  
15 it's a relatively simple answer, which is the ESP, the  
16 early site permit, should contain site parameters with  
17 respect to the results of the actual site  
18 characteristics; that is, the soil conditions,  
19 hydrology and so on and so forth. If a design is  
20 certified, it will have postulate site parameters that  
21 it would meet.

22 JUDGE ABRAMSOM: That would be acceptable  
23 for that plant. Okay.

24 MS. WEISMAN: Right, that would be  
25 acceptable for that design, as certified. Then at the

1 COL hearing, the issue would simply be do the  
2 postulated site parameters for the certified design,  
3 do they meet what's actually established, the actually  
4 established site parameters in the early site permit?  
5 If they do, those issues are foreclosed. If they  
6 don't, then they can be litigated.

7 CHAIRMAN BOLLWERK: All right. Now let me  
8 go the next step. Let's say the AP-1000, for  
9 instance, isn't certified to be built underground.  
10 Does that mean that they are then foreclosed from  
11 building it underground absent that they have to then  
12 -- is that then open for question at the combined  
13 operating license stage? What Ms. Curran would like  
14 is basically a ruling that says for security reasons,  
15 all these need to be underground, if I'm  
16 understanding. Is that where you're headed?

17 MS. CURRAN: No.

18 CHAIRMAN BOLLWERK: All right.

19 (Laughter.)

20 MS. WEISMAN: Since the design of the  
21 reactor, and I don't know what the case is for the AP-  
22 1000, but the design for the reactor is set in the  
23 design certification rulemaking. If it's an above-  
24 ground design and it's been certified, then the staff  
25 has determined that that's acceptable, the Commission

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1 has determined it's acceptable.

2 CHAIRMAN BOLLWERK: Okay.

3 MS. WEISMAN: Through the rulemaking.

4 CHAIRMAN BOLLWERK: All right. And if the  
5 Applicant then wanted to build it underground, that  
6 would be subject to the litigation in the rulemaking  
7 or subject to litigation in the --

8 MS. WEISMAN: That would be a change to  
9 the certification --

10 CHAIRMAN BOLLWERK: All right.

11 MS. WEISMAN: -- and pursuant to Section  
12 VIII of any of the appendices for the currently  
13 certified reactors, would be open to litigation, if  
14 it's not encompassed in the design -- I'm assuming for  
15 purposes of the argument that it's not encompassed in  
16 the design certification. That would be a change.

17 MR. LEWIS: Judge Bollwerk, may I just  
18 try?

19 CHAIRMAN BOLLWERK: Sure.

20 MR. LEWIS: With respect to an early site  
21 permit at the COL stage, we'll have to show that we  
22 are bounded by the PPE. If we're not bounded by the  
23 PPE, then the ESP isn't going to help us. We'll have  
24 to provide further design information at that point in  
25 time. If we're choosing a certified design at that

1 stage, we have to be bounded by -- we have to use the  
2 certified design if we're using something else, if  
3 we're outside the design certification.

4 CHAIRMAN BOLLWERK: Right.

5 MR. LEWIS: If in the future the  
6 Commission changed its certification or changed its  
7 rule and said, "Henceforth, all containments shall be  
8 below grade," if we chose a containment that was  
9 within 140 feet of the surface, and by the way, our  
10 application isn't just data, I mean we are assessing  
11 the foundations for stability and so we're providing  
12 the data in that context and looking at where bedrock  
13 is and could you put a foundation down there and is it  
14 stable, if we were in that plant parameter envelope,  
15 that we would be able to rely on the PPE. If we had  
16 to put in a plant that would have a 300-foot deep  
17 foundation, we'd obviously be outside it, and we would  
18 not be able to rely on the ESP.

19 CHAIRMAN BOLLWERK: Okay.

20 JUDGE ABRAMSOM: So if I can summarize  
21 this, Ms. Curran, what I think I'm hearing is the  
22 following: The precertified advanced reactor designs  
23 some have looked at the possibility of installation  
24 below grade. They will establish conditions of the  
25 subsurface -- the subsurface conditions -- correct me,

1 staff, if I get this wrong, please -- those  
2 precertifications establish subsurface conditions that  
3 are acceptable for that installation. If on one of  
4 these sites those conditions are met and that design  
5 is selected, then that plant can be built there  
6 without further hearing. And if those conditions are  
7 not met and that plant is selected, then there's a  
8 hearing. It's reopened to deal with it. And if the  
9 plant was not certified, the plant that's chosen was  
10 not certified for subsurface conditions, then there's  
11 a hearing if the Applicant elects to build below  
12 grade. Is that correct, staff?

13 MS. WEISMAN: Yes, Your Honor.

14 CHAIRMAN BOLLWERK: Having heard all of  
15 that, is there anything else you want to say about any  
16 of this?

17 MS. CURRAN: Well, it seems to me that  
18 maybe what this regulation does, this 100.21(f) is  
19 kind of jump the gun on the question of are the  
20 conditions met, because it does require some  
21 assessment of the suitability of the site, and of  
22 course we're only concerned about security issues  
23 here. So I suppose it's possible that in the course  
24 of the construction permit or combined licensing  
25 process that it will be determined that this site is

1 suitable for below grade construction and it will  
2 happen without a hearing.

3 (Whereupon, the proceedings went off the  
4 record at 12:34 p.m. for a lunch break and resumed at  
5 1:27 p.m.)

6 CHAIRMAN BOLLWERK: All right. If we  
7 could have everybody come to order, we'll try to get  
8 started. We can go on the record, please.

9 All right. We are back after our lunch  
10 break to continue with argument on the contention,  
11 admissibility for the early site permit cases. The  
12 next contention group that we have is entitled "Severe  
13 Accident Impacts." It deals with two contentions,  
14 North Anna Environmental Contention 3.1 and also Grand  
15 Gulf Environmental Contention 3.2.

16 The time allocation on this one was 25  
17 minutes. How do you want to break it up?

18 MS. CURRAN: I'd like to take 15 for my  
19 argument and ten for reply.

20 CHAIRMAN BOLLWERK: All right. And again,  
21 this deals with just the North Anna and Grand Gulf.  
22 So we'll be listening.

23 Are you all going to be doing separate  
24 arguments?

25 MR. LEWIS: The Petitioner has dropped

1 this contention for North Anna.

2 MS. CURRAN: Yes, we do.

3 CHAIRMAN BOLLWERK: Oh, for North Anna.

4 All right. That's right. Okay. Thank you.

5 MS. CURRAN: So we're down to Grand Gulf.

6 CHAIRMAN BOLLWERK: All right. We're down  
7 to Grand Gulf.

8 MS. CURRAN: And I think SERI and the  
9 Petitioners have both accused each other correctly of  
10 using cookie cutters for the application and the  
11 contention, which is true. As far as we could tell,  
12 the portions of the applications submitted by Dominion  
13 and SERI regarding severe accident consequences were  
14 virtually identical, and we did virtually identical  
15 contentions to challenge them.

16 I think the parties are in agreement that  
17 the applicant has to do some kind of severe accident  
18 analysis here, not as detailed an analysis as one  
19 would have to do for, say, an operating license  
20 application, but SERI references SECY 91-041 in which  
21 the Commissioners said that the EIS -- it's supposed  
22 to look at the upper bound on the environmental effect  
23 of the plant's operation.

24 So much the same as some of these other  
25 analyses have been done, the idea is to look at the

1 bounds of the environmental impacts of severe  
2 accidents from these proposed designs and analyze  
3 that.

4 We looked at what was done there. It  
5 seemed to us that what the applicants had done was to  
6 just basically incorporate parts of the environmental  
7 impact statement for license renewal without actually  
8 applying the design characteristics of the advanced  
9 reactor designs, and that this was in conflict with  
10 some guidance documents that had been issued by the  
11 NRC staff in the form of letters back and forth to the  
12 Nuclear Energy Institute, and we had attached those as  
13 exhibits.

14 Well, now Dominion has, in fact, submitted  
15 a severe accident analysis that does incorporate  
16 information about the characteristics of the design of  
17 the proposed reactors, and this is the kind of  
18 analysis that we are looking for from SERI as well.

19 I'm not going to comment on the adequacy  
20 of Dominion's analysis because we haven't had the  
21 opportunity to have someone evaluate it, but this is  
22 the sort of analysis that we think is required by the  
23 NRC guidance and which has not been provided by SERI.

24 I believe that SERI and the staff argue  
25 that we're not entitled to rely on these staff

1 guidance documents because they're not regulations.  
2 We understand that they're not regulations, but they  
3 do represent the staff's position on this issue and  
4 explanation of what the NRC is looking for in the  
5 application, and it is legitimate to rely on them as  
6 basically endorsements of our position, as another  
7 professional opinion as to what ought to be required  
8 here.

9 For this I would cite to you the Louisiana  
10 Energy Service's case that I mentioned before, LBP-91-  
11 41, 34 NRC 332, and the exact page is 348.

12 One of the things the licensing board says  
13 here is that it isn't sufficient just to rely on a  
14 staff guidance document and say that because the  
15 applicant didn't comply with it, then the application  
16 is deficient. But if the contention explains why,  
17 then the staff guidance document can be relied on.

18 And we did that in the contention. We  
19 explained why it isn't. The fact that the  
20 characteristics of these proposed designs are  
21 different from the characteristics of existing reactor  
22 designs, that it's necessary to justify using NUREG  
23 1437 by explaining how it could be applicable to these  
24 new designs.

25 And I would also, in support of our

1 contention, I think it would be useful for the Board  
2 to look at Dominion's response and the analysis that  
3 Dominion submitted in a response to a request for  
4 information, additional information, on May 17th,  
5 2004. That response is cited in our reply to Dominion  
6 at page -- no, actually it's cited in our reply to  
7 SERI at page 13.

8 That's all I have at the moment.

9 CHAIRMAN BOLLWERK: All right. Any Board  
10 questions at this point?

11 (No response.)

12 CHAIRMAN BOLLWERK: No? All right. Let  
13 me turn to SERI then and see what they have to say.

14 MS. SUTTON: One thing I'd like to  
15 emphasize is that Petitioners' claim that SERI's  
16 discussion of severe accidents is inadequate because  
17 it relies on the findings and conclusions in the GEIS  
18 for license renewal, which is NUREG 1437,  
19 specifically, without providing specific design  
20 information, and that's really the point here. That's  
21 just not the case.

22 SERI's application does set forth an  
23 assessment of severe accident impacts, and it  
24 specifically includes the framework and justification  
25 for applying the generic assessment in NUREG 1437.

1           In the Petitioners' reply, they contend  
2 that there is a material dispute here regarding the  
3 adequacy of the severe accident analysis, but our  
4 question is what is that dispute. We don't see it in  
5 either the contention or the reply or the argument  
6 here today.

7           Petitioners merely characterize the  
8 assessment as a cookie cutter, but even if that's the  
9 case, why is that inappropriate?

10           The petition for Petitioners is how is the  
11 justification for applying NUREG 1437 inadequate, and  
12 they haven't answered that, and that's the deficiency  
13 in their contention.

14           Their reply brief and their pleadings in  
15 this case do not demonstrate the existence of a  
16 genuine litigable dispute.

17           What Dominion has done is outside the  
18 scope of the Grand Gulf ESP application. It just  
19 simply is not relevant, and we're not going to comment  
20 on it further.

21           Turning to the NEI correspondence and the  
22 NRC staff correspondence with NEI that Ms. Curran has  
23 referred to, their contention basically relies on  
24 these two guidance documents, and they're not even  
25 guidance documents. They're letters.

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1           The first is an April '03 NRC letter, and  
2 they indicate that it is incumbent on an ESP applicant  
3 to justify its conclusions regarding the impacts of  
4 construction and operation even though they may be  
5 similar to those in NUREG 1437, and SERI has taken  
6 that to heart. It's the justification in its  
7 application, and we'll discuss that in a moment.

8           In another letter two months later, 603,  
9 the NRC indicates that it will perform its review of  
10 severe accident environmental impacts in accordance  
11 with the ESRP, the Environmental Standard Review Plan,  
12 Section 7.2.

13           It further acknowledges that severe  
14 accident impact analysis is technically feasible at  
15 the ESP stage using a PPE approach, as SERI has used,  
16 and that the existing guidance in the ESRP Section 7.2  
17 is adequate for this purpose. That's the regulatory,  
18 the guidance document background that Petitioners have  
19 referred to.

20           There also is an applicable regulation,  
21 and it is found in 10 CFR Section 52.17(a)(2). That  
22 indicates that an ER must focus on the environmental  
23 effects of construction and operation of a reactor or  
24 reactors that has characteristics in the postulated  
25 site parameters. That's what SERI has done, and that

1 regulation has been satisfied.

2 Thus, there is no regulatory basis or  
3 basis in these two NRC guidance correspondence that  
4 Petitioner refers to that indicate that SERI must  
5 provide specific design information as indicated in  
6 this contention to justify the evaluation of severe  
7 accidents.

8 With respect to severe accidents, the  
9 plant information regarding dose consequences need not  
10 be specific to a reactor design, but need only  
11 consider bounding values for releases in order to  
12 assess site suitability considerations.

13 Now, let's take look at the Grand Gulf  
14 application, and understand what has been done. SERI  
15 has employed a PPE approach, as you're all well aware,  
16 in lieu of specifying a specific plant design, and  
17 this is in Section 1.3 of the application. The PPE  
18 parameters, along with the information about site  
19 features, i.e., the site characteristics, support the  
20 Section 52.17 analysis I just discussed, which is  
21 required to demonstrate site suitability.

22 Consistent with the PPE approach, SERI has  
23 based its assessment of the environmental impacts of  
24 severe accidents on NUREG 1437, which is the GEIS for  
25 license renewal, and you can find this justification

1 in Section 7.2.2 of the environmental report.

2 In summary, what they've done and the  
3 elements of the justification are as follows. GEIS  
4 for license renewal is based on existing assessments  
5 of severe accident impacts presented in numerous final  
6 environmental statements for a number of plants  
7 published after 1980, and these are representative  
8 plants here in the United States, and they include  
9 Grand Gulf.

10 The method for measuring severe accident  
11 risk in NUREG 1437 also applies in the context of an  
12 ESP, and in this case the premise is that severe  
13 accident risk per reactor year remains constant over  
14 the life of the plant, and that that is equally  
15 applicable to license renewal and to ESP.

16 NRC's 1985 severe accident policy  
17 statement sets forth the NRC expectation that new  
18 plants would achieve a higher standard of severe  
19 accident safety than prior designs, and in fact, this  
20 expectation has been borne out in NRC design  
21 certifications, which can be found again at 10 CFR  
22 Part 52, Appendices A, B, and C.

23 And then in addition to this generic  
24 rationale, SERI accounted for site specific  
25 environmental considerations, such as population and

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1 meteorology in assessing severe accident impacts

2 On these bases, it concluded that the  
3 factors for the Grand Gulf ESP site are not  
4 substantially different from those factors identified  
5 for previously analyzed sites in NUREG 1437.

6 Thus, the Grand Gulf ESP site is within  
7 the range of risk previously determined to be small.

8 Petitioners do not contest the adequacy of  
9 this PPE approach and they do not directly controvert  
10 the analyses set forth in Section 7.2 of the  
11 environmental report. So there is no basis that  
12 establishes why the PPE parameters and the site  
13 characteristic information provided by SERI are  
14 insufficient to demonstrate site suitability or why  
15 there is an insufficient justification for reliance on  
16 NUREG 1437.

17 Finally, if severe accident impacts and  
18 mitigation alternatives evaluated for the ESP do not  
19 bound a future site that's selected for a future  
20 reactor design, then in the future the Commission must  
21 approve that design and the variances during a CPOL  
22 or COL proceeding, not during the ESP proceeding, and  
23 in support of that we'll again cite 50.39(b).

24 I have nothing further.

25 JUDGE ABRAMSON: Counselor, you cited the

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1 proposition or the comment from the staff to the  
2 effect that they would expect lower releases or lower  
3 consequences from the newer plant designs.

4 MS. SUTTON: Correct.

5 JUDGE ABRAMSON: I guess I'll ask staff.

6 MS. SUTTON: And that was a Commission  
7 expectation in their 1985 severe accident policy  
8 statement.

9 JUDGE ABRAMSON: Okay. Are you aware if  
10 analyses that have been done on the newer plants, new  
11 plant designs, have indicated that or have there not  
12 been -- I know we have SAR short of analysis. Do we  
13 have anything that looks like FSAR analysis?

14 MS. SUTTON: It's my understanding that  
15 those analyses were part of the design certifications  
16 that are in Appendices A through C.

17 JUDGE ABRAMSON: And those numbers are, in  
18 fact, lower than the numbers that were used in the  
19 NUREG 32?

20 MS. SUTTON: Yes. that's my  
21 understanding.

22 JUDGE ABRAMSON: We'll ask the staff.

23 If and when you file for a combined  
24 operating license, could you take the same approach as  
25 you took here?

1 MS. SUTTON: If there's new material  
2 information, for example, that becomes available  
3 between the time when you complete the ESP proceeding  
4 and you file an application for a COL, I think your  
5 question goes to whether or not at that point that  
6 aspect of this contention could be open. If it's new  
7 and material information, the answer would be yes.

8 JUDGE ABRAMSON: Does that get opened only  
9 in the cases that the consequences were more severe?  
10 I could see an applicant coming in saying, "Well, we  
11 only took credit for NUREG 1437 level risk. Now we've  
12 got a new design that's significantly less. We want  
13 to make some changes that will allow us to still be  
14 within the parameters." Is that still open?

15 MS. SUTTON: It would still be open.  
16 You'd have to do the site specific analysis.

17 CHAIRMAN BOLLWERK: Do you have any  
18 questions?

19 (No response.)

20 CHAIRMAN BOLLWERK: All right. I'm sure  
21 the staff have.

22 MR. WEISMAN: Thank you, Your Honor.

23 I think the analysis here is very simple.  
24 The staff letters amount to guidance documents. They  
25 are not binding, although they set forth one method

1 for complying with the regulations. They clearly  
2 indicate that other methods could be acceptable, and  
3 the staff's bottom line set forth in the letters is if  
4 and applicant tends to rely on previous studies, they  
5 have to justify that..

6 And the second point is that the SERI  
7 application provides a rationale to justify use of  
8 NUREG 1437 in this context, and the Petitioners don't  
9 dispute any of that rationale. So the Petitioners  
10 simply have not identified any dispute with the  
11 application.

12 The staff is not taking any position on  
13 the validity of that rationale. That would be a  
14 merits question, but as far as admissibility goes, we  
15 cannot identify any dispute petitioners have with the  
16 application.

17 Now, as to your question, Judge Abramson,  
18 about the level of risk from the advanced design,  
19 there is a severe accident evaluation done for each  
20 one of the designs, and that was done for all three of  
21 the certified designs, as reflected in Appendices A,  
22 B, and C to Part 52.

23 I don't know what the numbers are off the  
24 top of my head, but --

25 JUDGE ABRAMSON: Do you have a technical

1 staff member with you who can address that or not?

2 MR. WEISMAN: I don't know. I can look at  
3 see, but we could get back to the Board on that if you  
4 wish. If you'll give me --

5 JUDGE ABRAMSON: Well, we understand the  
6 legal argument. I was just trying to see if we could  
7 address the factual situation as well. So it would be  
8 nice if you can.

9 MR. WEISMAN: All right. Thank you, Your  
10 Honor.

11 Your Honor, we will try and find the  
12 cognizant staff and address your question at the end  
13 of the argument if we can.

14 CHAIRMAN BOLLWERK: Anything further from  
15 staff at this point? No?

16 MR. WEISMAN: The staff has nothing more  
17 at this point. Thank you.

18 CHAIRMAN BOLLWERK: Okay. Let me turn to  
19 Ms. Curran then for rebuttal.

20 MS. CURRAN: Our aim with this contention  
21 is to show that we have a genuine and material dispute  
22 with the Applicant for the Grand Gulf ESP regarding  
23 the adequacy of its severe accident analysis for this  
24 proposed new plant, and from what I've heard today, it  
25 doesn't seem to me there's any doubt that at the very

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1 least we have a disagreement.

2 It isn't true that we haven't addressed  
3 the application and we haven't raised the dispute. If  
4 you look at page 30 of our contention, we explain what  
5 aspects of this analysis that's been provided in 7.2.2  
6 of SERI's environmental report are not adequate to  
7 meet the specifications given by the NRC staff in that  
8 letter.

9 For instance, the NRC in the letter says  
10 that the application should describe the spectrum of  
11 credible releases from candidate future plant designs  
12 in terms of representative source terms and their  
13 respective frequencies, and that they should use  
14 release characteristics in conjunction with site  
15 specific population and meteorology to determine site  
16 specific risk impacts for the surrogate design.

17 That information isn't in this application  
18 because SERI didn't attempt to make any analysis of  
19 differences between these new designs and the designs  
20 of the current generation or of the existing plant or  
21 whatever existing plants were analyzed in NUREG 1437.

22 These new designs are fundamentally  
23 different. It's necessary, as the NRC says in its  
24 correspondence, to look at the differences and give  
25 some kind of justification if you're going to apply

1 NUREG 1437. Give a justification for why it's  
2 appropriate to apply that analysis to a plant of a  
3 completely different design.

4 And I know there was a question asked of  
5 the staff about whether there had been a severe  
6 accident analysis for these designs in general, but  
7 that wouldn't be enough here because what this  
8 analysis requires is you take what you know about the  
9 design and its relationship to the characteristics of  
10 the site, and those two elements go into the severe  
11 accident analysis. And it just isn't in this  
12 application.

13 So what we want is a chance to litigate,  
14 to debate what would be an adequate analysis of the  
15 potential for severe accident not in the exhaustive  
16 detail required for an operating license application,  
17 but so that one could get a sense of the outer limits  
18 of what the impacts could be.

19 I think I heard Mr. Weisman say that the  
20 NRC staff letters don't amount to staff guidance.  
21 They don't amount to binding requirements, and we  
22 can't rely on them.

23 We do rely on them, and we're entitled to  
24 rely on them for the expertise of the NRC staff in  
25 evaluating what kind of information is available and

1 what kind of information is appropriate to put into an  
2 analysis of severe accident consequences at the ESP  
3 stage.

4 That isn't in the regulations. It's  
5 helpful to have the staff guidance to understand how  
6 that analysis would be filled out, what kinds of  
7 information one would look for.

8 That staff correspondence makes it very  
9 clear that it's not sufficient just to apply NUREG  
10 1437 without giving some additional analysis as to why  
11 it should apply. We have raised a genuine and  
12 material dispute with the Applicants, and the  
13 contention should be admitted.

14 MR. WEISMAN: Your Honor, may -- I'm  
15 sorry. Sorry.

16 MS. CURRAN: I'm done.

17 MR. WEISMAN: I just wanted to correct for  
18 the record. What I said before was that the letters  
19 are guidance.

20 MS. CURRAN: Oh, I'm sorry.

21 MR. WEISMAN: They are guidance.

22 MS. CURRAN: I didn't hear you right.

23 MR. WEISMAN: Okay. They're not binding.  
24 Guidance is not binding.

25 JUDGE ABRAMSON: Let's pursue this for a

1 moment because it sounds to me like the issue really  
2 hinges on two things. One, the staff has advised that  
3 it is an acceptable approach to use other analyses so  
4 long as it's justified, and did I hear the staff say  
5 that they felt this was justified without evaluating  
6 technical merits, that the approach was justified by  
7 --

8 MR. WEISMAN: No, I'm not sure, Your  
9 Honor. We look to see if something is technically  
10 justified. We haven't done that yet.

11 JUDGE ABRAMSON: No, I wasn't asking that.  
12 I thought I heard you say that they could take an  
13 approach other than that in the guidance letters --

14 MR. WEISMAN: Correct.

15 JUDGE ABRAMSON: -- as long as they  
16 justified that approach.

17 MR. WEISMAN: Correct.

18 JUDGE ABRAMSON: And had you looked to see  
19 if they justified that approach?

20 MR. WEISMAN: We have not. The staff is  
21 reviewing SERI's approach, and we are not taking the  
22 position on whether it's justified or not.

23 JUDGE ABRAMSON: Okay. That's one piece.

24 The second piece was there is a view  
25 propounded by the Applicant to the effect that these

1 numbers obtained from NUREG 1437 would bound the  
2 numbers, the source term numbers at least, that would  
3 be derived from the new plants.

4 If that's the case, Ms. Curran, if, in  
5 fact, the numbers from NUREG 1437, the source term  
6 numbers, are greater than the source term numbers  
7 associated with the new plant designs that have been  
8 approved, would you still object to the use of those  
9 numbers, which it seems to me would result in great  
10 releases or prediction of greater releases, rather?

11 MS. CURRAN: Well, what we're concerned  
12 about is that we think it's overly simplistic to say  
13 that they're bounding because these plants behave  
14 differently, and that one should look at the  
15 difference in the behavior of the plant.

16 JUDGE ABRAMSON: Without getting into the  
17 merits of a particular plant's design or the level of  
18 analysis that needs to be performed, if one looks at  
19 the source term from the point of view of the amount  
20 of radiation released and its characteristics and the  
21 frequency of those events, what more would you need to  
22 see?

23 MS. CURRAN: Well, I guess what we would  
24 want to see is justification for that claim that the  
25 source terms are bounding. And we don't believe

1 that's been presented.

2 JUDGE BARATTA: So what you're saying then  
3 is not necessarily that the focus they chose is  
4 inadequate, but information that was presented would  
5 justify that approach taken.

6 MS. CURRAN: "Approach" is kind of a  
7 general word. I think their approach was to  
8 oversimplify, and so we're not satisfied with their  
9 approach.

10 We think it's okay to perform some kind of  
11 -- there isn't anything wrong with applying NUREG 1437  
12 if it can be justified, if it can be demonstrated that  
13 one is taking into account the differences that could  
14 affect the result.

15 If that's done, then we would be satisfied  
16 with the analysis, but we don't think that's been done  
17 here.

18 JUDGE ABRAMSON: So if I can paraphrase  
19 that one more time, what you're looking to see is that  
20 the use of these source terms from NUREG 1437, in  
21 fact, bound what one could expect from these other  
22 plant designs.

23 MS. CURRAN: Yes.

24 JUDGE ABRAMSON: Personally I don't view  
25 that as over simplistic. I view that as doing a

1 bounding calculation. If you can do it on the back of  
2 an envelope, wonderful. It's better than running a  
3 big computer code with a lot of uncertainties.

4 CHAIRMAN BOLLWERK: You had mentioned that  
5 the analysis needed to take into account behaviors.  
6 Can you give me an example of the type of behavior  
7 you're interested in or you're making out, trying to  
8 avoid being overly simplistic?

9 MS. CURRAN: Because they're fundamentally  
10 different designs, I can't give you an example, but it  
11 seems to me that that's an important consideration.  
12 One would want to see some kind of explanation we have  
13 looked at the design of the new reactors and we've  
14 made some kind of evaluation of that.

15 I mean, one of the factors that Ms. Sutton  
16 mentioned was -- and this was an example of a number  
17 of them that I found in the environmental report --  
18 the risk remains constant over time; that that's the  
19 same for existing reactors as for the new reactors.

20 Well, that just seems to me to be that's  
21 a factor that they have in common, but that doesn't  
22 get to the basic differences in the design  
23 characteristics. It's just one factor that has to do  
24 with aging of the plants.

25 But you can't see an analysis here of the

1 differences in the reactor designs and how that might  
2 affect the consequences. You see some real broad  
3 generalizations about aging, but that's not all there  
4 is to it.

5 CHAIRMAN BOLLWERK: Any other questions?

6 JUDGE ABRAMSON: No.

7 JUDGE BARATTA: Just let me follow up on  
8 that last. Are you taking issue with the statement  
9 that the risk can remain constant for a given plant or  
10 are you taking issue with that statement as if they're  
11 using the same risk for all of the plants?

12 MS. CURRAN: I'm not taking issue with the  
13 statement. I'm saying this was the only kind of  
14 comparison that was made. Okay. For the existing  
15 reactor and the advanced reactor, the risk remains  
16 constant over time. Well, that begs the question of  
17 what is the risk. If you don't see anything in this  
18 application about what is the risk comparatively  
19 speaking of one type of plant with another, who cares  
20 whether it remains the same over time?

21 That's what we were getting at with this  
22 contention, is that you see some issues that are  
23 addressed, but then the really important ones don't  
24 make it into the application. What's the basic  
25 differences between the designs that were analyzed in

1 NUREG 1437 and the designs that are being proposed  
2 here? You just don't see it.

3 JUDGE BARATTA: Getting back, again, to  
4 this idea of a bounding calculation for plant  
5 parameter defines, for argument's sake, facts could be  
6 minimum in values for certain things such as risk. If  
7 now starting for some future date to come in with a  
8 certified design that had a risk that was higher than  
9 that value, I believe that Part 52 would require that  
10 that issue be reopened.

11 So is it an issue with the methodology  
12 that was chosen or the way that they applied the  
13 methodology that you're concerned about?

14 They've established an envelope of values  
15 per the different parameters. What would that one  
16 list? And then wouldn't various evidence solve that,  
17 okay, that falls within the risk that's addressed in  
18 1437 and, therefore, I can use that?

19 That is, I believe, what I heard them say.

20 MS. CURRAN: Well, I would just go back to  
21 that correspondence from the staff, which explains  
22 what the staff is looking for in a NEPA analysis, and  
23 I think that's the kind of guidance we're looking at  
24 to be followed in this application.

25 We took that guidance, and then we looked

1 at the application in light of that guidance, and we  
2 didn't see the kind of analysis that is described in  
3 that correspondence from the NRC.

4 JUDGE ABRAMSON: Let me pick up on this.  
5 What you're alleging is, in essence, that there is an  
6 omission from the application. You're missing  
7 information about how they can conclude that using  
8 NUREG 1437 bounds what they might see from the new  
9 plants.

10 Is that accurate?

11 MS. CURRAN: Yes.

12 JUDGE ABRAMSON: Thank you.

13 CHAIRMAN BOLLWERK: Anything further?  
14 Anything either SERI or the staff wants to say?

15 MS. SUTTON: I would like to add one  
16 thing, Your Honor.

17 Again, going back to the rules of Part 2  
18 applicable to this proceeding, we don't believe that  
19 with the requisite specificity and basis in their  
20 pleadings the petitioners have not directly  
21 controverted the analysis that's in Section 7.2 of the  
22 environmental report.

23 CHAIRMAN BOLLWERK: Does staff want to  
24 add?

25 MR. WEISMAN: Thank you, Your Honor.

1 First, to answer one of Judge Abramson's  
2 questions, the designs that are certified in  
3 Appendices A, B, and C of Part 52, the severe accident  
4 risk for those designs is lower than for the current  
5 generation of plants.

6 And, second, you had asked me another  
7 question, Your Honor, and I think that I'd just like  
8 to clarify the answer. SERI has provided a  
9 justification in the application for use of NUREG  
10 1437, but the staff has not yet passed on the validity  
11 of that justification.

12 That's all the staff has.

13 CHAIRMAN BOLLWERK: Ms. Curran, anything  
14 further?

15 MS. CURRAN: Well, the subject of the  
16 contention is the adequacy of the justification. So  
17 it sounds like the staff isn't in a position to  
18 comment that our concerns about adequacy have been  
19 satisfied.

20 That's all.

21 CHAIRMAN BOLLWERK: All right.

22 MR. WEISMAN: Your Honor, may I address  
23 that, please?

24 CHAIRMAN BOLLWERK: All right, but Ms.  
25 Curran gets the last word, as always.

1 MR. WEISMAN: Yes, Your Honor. I'm sorry.

2 Just to be clear, the staff's position is  
3 that the Petitioners have not disputed any portion of  
4 that justification. The issue is did, as the  
5 Petitioners answered Judge Abramson, there was an  
6 omission from the application. The staff's position  
7 is there's no omission. The justification is there.  
8 The Petitioners have not identified any dispute with  
9 that justification.

10 That doesn't get to the merits of the  
11 question as to whether it is in the staff's view an  
12 adequate justification.

13 CHAIRMAN BOLLWERK: Ms. Curran?

14 MS. CURRAN: I don't have any more to add.

15 CHAIRMAN BOLLWERK: All right. I take it  
16 there are no other questions from the Board members on  
17 that then?

18 (No response.)

19 CHAIRMAN BOLLWERK: All right. Let's go  
20 ahead then and move to the next set of contentions,  
21 each under the heading of "Waste Confidence." They  
22 include Clinton Environmental Contention 3.2, North  
23 Anna Environmental Contention 3.2, and Grand Gulf  
24 Environmental Contention 3.3, and there are a number  
25 of subcontentions or parts of these that we'll be

1 talking about as well.

2 Ms. Curran, you have 40 minutes. How  
3 would you like to divide your time?

4 MS. CURRAN: Twenty and 20, please.

5 CHAIRMAN BOLLWERK: All right. Should I  
6 be looking for a text line on this? We hadn't heard,  
7 right?

8 (Pause in proceedings.)

9 CHAIRMAN BOLLWERK: I'm sorry. I'm  
10 waiting for you, and you're waiting for me. All  
11 right. You can go forward then. I saw you flipping  
12 through your book. I thought you were looking for  
13 something. I'm sorry.

14 MS. CURRAN: Well, I have been trying to  
15 get my things together here.

16 What this contention boils down to is that  
17 in the 1984 waste confidence rulemaking and in the  
18 1990 revision to that rulemaking, the Commission  
19 addressed the capacity of two hypothetical  
20 repositories to accommodate spent fuel and high level  
21 waste generated by existing nuclear power plants  
22 either under their original license term or a renewed  
23 license term, and the Commission has not in either  
24 rulemaking addressed the capacity of these  
25 repositories to accommodate fuel from a new generation

1 of advanced reactors.

2 In the absence of a finding that there is  
3 sufficient capacity in either of these two  
4 repositories, or both, then the Commission needs to go  
5 back and evaluate whether there is room to also store  
6 the spent fuel that will be generated by this new  
7 generation of nuclear reactors, including the three  
8 reactors that are at issue here.

9 This is the lesson of the State of  
10 Minnesota case that propelled the NRC to do the waste  
11 confidence rulemaking in the first place, and it's  
12 also the logical result of the waste confidence  
13 rulemaking. The Commission took the responsibility to  
14 make this determination. Is there sufficient  
15 capacity? Can we have confidence that we have a place  
16 to put this high level waste and that spent fuel will  
17 not have to be stored indefinitely at reactor sites as  
18 a result?

19 And we don't have that. There's nothing  
20 in this record that addresses the capacity of these  
21 repositories to store advanced reactor fuel. What we  
22 have is at one place in the record the Commission  
23 discusses, they mention a second generation of  
24 reactors in the context of the institutional  
25 uncertainties arising from how long does it take to

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1 get one of these repositories on line.

2 But that's quite distinct from making a  
3 finding that there will be a repository with capacity  
4 to accommodate this fuel, and it's our view then in  
5 the absence of that kind of a finding, under NEPA the  
6 Commission has to address that issue in the context of  
7 these individual licensing cases or do a new  
8 rulemaking.

9 And that really is our position in a  
10 nutshell. I think it really does boil down to that,  
11 and I think I'll stop there and listen to what the  
12 other parties have to say.

13 CHAIRMAN BOLLWERK: They place substantial  
14 reliance on the use of the word "any" several times.  
15 Would you like to say anything about that?

16 MS. CURRAN: Well, you have to look at how  
17 that word was used, and in the context of the -- you  
18 have to look at the rulemaking documents, and that  
19 word was first used in 1984, and the Commission  
20 clearly was talking about any existing reactors, and  
21 I think we go into that in some detail in our  
22 contention and your reply.

23 In 1984, the Commission wasn't thinking  
24 about license renewal, and they certainly weren't  
25 thinking about a new generation of reactors. They

1 were thinking about the reactors that existed, and the  
2 most telling thing is that when they did the capacity  
3 analysis, they looked at what would be generated by  
4 existing reactors. That's what's really important, is  
5 what reactors did the Commission look at when they  
6 analyzed the capacity of these repositories in  
7 comparison to what amount of waste was likely to be  
8 generated.

9 They were looking at the existing  
10 generation of nuclear reactors, and the same thing is  
11 true when you go the 1990 rulemaking. They revisited  
12 the capacity question. They revised their figures on  
13 how much spent fuel and high level waste would be  
14 generated, and they compared that to the capacity  
15 figures, and they came up that there was enough space.

16 But you don't see in either one of those  
17 rulemakings any reference to any prediction of the  
18 amount of spent fuel that would be generated by a new  
19 generation of reactors. It just isn't there.

20 CHAIRMAN BOLLWERK: Although there is a  
21 reference there, if I recall, or a statement about how  
22 they're sure that, if necessary, the Congress would go  
23 forward with a second repository to increase that  
24 capacity.

25 MS. CURRAN: That's right. That's the

1 second repository. Okay? And what we have here in  
2 these rulemaking is, first of all, in the 1984  
3 rulemaking the Commission expressed confidence that  
4 there would be -- I can't remember exactly the words  
5 they used, but they had some confidence that they  
6 would have two repositories.

7 Then they backtracked on that in the 1990  
8 rulemaking, and they said, "We're confident that we'll  
9 have at least one.

10 That expression of confidence, I think,  
11 relates to the institutional uncertainty, and they're  
12 saying they think we're going to have one. We may  
13 have two.

14 That's not really what's at issue in this  
15 contention. What's at issue in this contention is the  
16 Commission's analysis of the capacity of those two  
17 repositories, and they only looked at the capacity of  
18 those repositories to accommodate fuel from the  
19 existing generation of nuclear reactors, plus fuel  
20 from any reactors whose license term might be renewed.

21 And if you look at the rule at that  
22 particular analysis, that is the only fuel and high  
23 level waste that's addressed. So the question of  
24 whether the Commission has confidence that a second  
25 repository is going to open in whatever the time frame

1 is, that relates to the question of institutional  
2 uncertainty, which really is not in terms of the  
3 timing of the repository.

4 What we have seen from these rulemakings  
5 is over time the Commission said, "We may have two  
6 repositories, and we think that we can store X amount  
7 of fuel in these repositories, and we are not going to  
8 generate more fuel than they could accommodate."

9 But they haven't gotten past that.

10 CHAIRMAN BOLLWERK: Is there a figure that  
11 they give for the second repository? I don't remember  
12 one, but it could be my memory is --

13 MS. CURRAN: Yes. It will take me a  
14 minute, but I can find it.

15 (Pause in proceedings.)

16 MS. CURRAN: Okay. In the 1984  
17 rulemaking, the capacity figures are on page 34,679,  
18 where the Commission estimates how much spent fuel is  
19 likely to be generated and then compares it to the  
20 capacity of the repositories.

21 This is in the middle column. They  
22 discussed the generating capacity of all commercial  
23 nuclear power plants in the U.S. with operating  
24 licenses or construction permits. This is where you  
25 see the first -- the use of the word "all" here

1 applies to all existing plants.

2 Now, if you go to the 1990 rulemaking at  
3 page -- wait a minute -- 38,501, the Commission looks  
4 at capacity figures in comparison to fuel generation  
5 or spent fuel generation figures. They say, "Current  
6 DOE spent fuel projects based on the assumption of no  
7 new reactor orders call for 87,000 MTHM to have been  
8 generated by the year 2036, including approximately  
9 9,000 MTHM of defense high level waste, with a  
10 likelihood that there will be reactor lifetime  
11 extensions and renewals. However, the no new order  
12 case probably underestimates the total spent fuel  
13 discharges."

14 And then they go on to analyze the  
15 capacity in light of that. They do a little  
16 forecasting and estimating compared to these capacity  
17 figures.

18 You don't see that anywhere in these  
19 rulemakings with respect to advanced reactor fuel.  
20 They weren't contemplating that

21 JUDGE BARATTA: Well, that statement  
22 though where it says probably underestimates no new  
23 order cases, underestimates the spent fuel discharge,  
24 suggests that they did.

25 Didn't you just read a statement that says

1 that?

2 MS. CURRAN: Yes. Well, I was --

3 JUDGE BARATTA: You're interpreting that  
4 to mean license extensions?

5 MS. CURRAN: I was interpreting that to  
6 mean license extension because the whole sentence is,  
7 "With the likelihood that there will be reactor  
8 lifetime extensions and renewals, however, the no new  
9 orders case probably underestimates total spent fuel  
10 discharges.

11 So it's a little ambiguous, but I think  
12 there isn't a mention of advanced reactors in here.  
13 They seem to be focused on license renewal. This was,  
14 I think, the impetus for this revision. One of the  
15 impetuses for this revision was that now they were  
16 getting these license renewal orders, and what did  
17 that mean in terms of their waste competence decision?

18 JUDGE ABRAMSON: It sounds to me like the  
19 initial projection was based on no new orders and no  
20 license renewals, and therefore, they sounded like  
21 they based it on closure of plants at the end of their  
22 then existing licenses. Is that the way you read  
23 that?

24 MS. CURRAN: Yes.

25 JUDGE ABRAMSON: So the no new order

1 scenario they were looking at assumed not only no new  
2 orders, but it also assumed that plants would be  
3 terminated or would be decommissioned at the end of  
4 their then existing licenses so that either scenario  
5 would make that, quote, no new order scenario an  
6 underestimate. Either you're adding new plants or  
7 you're extending the life of old plants. Either way  
8 you're adding more fuel, more spent fuel.

9 MS. CURRAN: I'd have to go back and look  
10 at the 1984 language. I don't know if they used the  
11 words "no new orders" in there. They may.

12 In 1984, they were thinking a different  
13 way, I think.

14 CHAIRMAN BOLLWERK: All right. Any other  
15 Board questions at this point?

16 (No response.)

17 CHAIRMAN BOLLWERK: All right. Let's go  
18 ahead and move on to the applicant.

19 MR. BESSETTE: Petitioners summed it up  
20 when they said it boils down to the waste confidence  
21 rule does not apply to this proceeding. It only  
22 applies to existing nuclear plants.

23 Despite Petitioners' attempt to narrow and  
24 redefine the terms of the waste confidence rule  
25 itself, the waste confidence rule does apply to this

1 proceeding. Therefore, this contention is  
2 inadmissible because it constitutes an impermissible  
3 challenge to the NRC regulations as barred by 10 CFR  
4 2.235.

5 Further, as I will discuss in more detail,  
6 it is completely unsupported. It's contrary to the  
7 original intent of the 1984 rule. It's contrary to  
8 the plain language of the rule itself, and it's  
9 contrary to the regulatory history.

10 I'd like to start with the intent of the  
11 rule itself. I think you can first best find the  
12 intent in the language of the rule, in particular,  
13 51.23(b). It states that it's intended to preclude  
14 consideration of environmental issues in environmental  
15 impact statements and in environmental reports  
16 prepared in connection with issuance of operating  
17 licenses, independent spec fuels, independent spec  
18 fuel storage installations, and amendments thereto.

19 If we abide by Petitioners' definition  
20 that this only applies to existing reactors, it would  
21 completely wipe out that part of the rule that says as  
22 it would apply to operating licenses, issuance of  
23 operating licenses. We believe that does not make  
24 sense.

25 As an early site permit is an initial step

1 of the operating license proceeding, the waste  
2 confidence rule would apply. We also believe that it  
3 made sense at the time because in 1984 several reactor  
4 plants were under construction. Several others were  
5 in the construction permit pipeline. It would have  
6 been logical for the Commission to have gone through  
7 five years of rulemaking to preclude consideration of  
8 the waste confidence rule and many of the primary  
9 licensing proceedings that had it in its pipeline.

10 We also believe the language is  
11 contrary -- their belief is contrary to the plain  
12 language of the rule. As we just discussed earlier,  
13 the waste confidence rule does not qualify the term  
14 "all."

15 With regard to on-site storage, it says  
16 that spent fuel from any reactor can be stored on site  
17 for 30 years beyond the end of its licensed life. The  
18 term "any" is not constrained or qualified in any way.

19 Again, this makes sense. The Commission  
20 was looking at the technology associated with storing  
21 spent fuel. The technology would be equally  
22 applicable to new reactors or new generation reactors.

23 With regard to off-site capacity, the  
24 waste confidence rule states that there is reasonable  
25 assurance that there will be sufficient repository

1 capacity available within 30 years beyond the license  
2 life of any reactor. Again, the terms "sufficient  
3 capacity" and "any" are not qualified in any way.

4 Using any plain meaning of the definition  
5 of "any," any dictionary definition, it would apply to  
6 existing reactors and new reactors.

7 I'd like to address the regulatory history  
8 of the waste confidence rule. With regard to 1984, we  
9 believe this is instructive and supportive of our  
10 position. Petitioners cite to isolate uses of the  
11 term "existing reactor" and the "waste confidence  
12 rule."

13 Well, if you look at their reference to  
14 the waste confidence rule in 1984, the use of the term  
15 "existing reactor" really only relies or goes back to  
16 the 1979 proposed rulemaking where they're  
17 paraphrasing the type of rulemaking they were going  
18 through in 1979.

19 Existing reactor is not found anywhere in  
20 any of the Commission's findings in 1984. In fact, if  
21 you do a word search on the 60 some odd pages of the  
22 Federal Register notice for the 1984 rulemaking, the  
23 term "existing reactor" only shows up twice, both in  
24 the first page and in reference to the 1979 proposed  
25 rulemaking. It is not incorporated to any of the

1 findings of the 1984 rule.

2 In their written contentions, Petitioners  
3 also refer to the term "existing" in Finding 2.  
4 Again, this is misplaced. It's talking about existing  
5 fuel, not existing reactors, and it also goes on to  
6 say in Finding 2 that it applies to additional fuel  
7 generated.

8 We think more importantly, however, that  
9 the Commission did deliberately consider new reactors  
10 in 1984. As petitioners stated on Federal Register  
11 page 34679, the Commission was looking at what  
12 capacity -- what would the spend fuels storage needs  
13 be in the future?

14 It compared the electrical generating  
15 capacity of nuclear reactors in 1984, and they  
16 predicted and compared to what it would be in the year  
17 2000.

18 In 1984, they estimated that based on  
19 operating reactors, reactors that were under  
20 construction and other reactors that were in the  
21 pipeline would be approximately 135 gigawatts of  
22 electricity.

23 They then compared it to the year 2000,  
24 and then they conservatively estimated there would be  
25 180 gigawatts electricity of nuclear capacity. Based

1 on that, they predicted there would be need for two  
2 spent fuel storage repositories each with about a  
3 100,000 metric ton capacity.

4 Even if you just compare their predictions  
5 of 1984 which included reactors that were under  
6 construction or in the pipeline, the difference  
7 between the 1984 and the 2000 comparison is at minimum  
8 35 large single unit nuclear plants. So for  
9 Petitioners to say that the Commission didn't consider  
10 new reactors is false, and they deliberately  
11 considered that in the capacity of the reactors.

12 Further, if you compare it to the actual  
13 generating capacity of nuclear power today, it's  
14 approximately 100 gigawatts of electricity. That is  
15 both less than the 1984 and the 2000 prediction.

16 So even under conservative predictions,  
17 the three reactors that we're considering here today  
18 are governed and encompassed by the 1984 findings with  
19 regard to expected discharge capacity.

20 We also note that in the 1984 rulemaking  
21 there is a section called Section 2 Commission  
22 findings which relates to the limitations of the  
23 finding on that rule. It states that the findings are  
24 limited to nuclear plants to be licensed under 103 and  
25 104.

1                   Again, it's a prospective looking rule.  
2                   It's meant to apply to future operating license  
3                   proceedings. So, therefore, both the terms of the  
4                   history of the 1984 rule that says "to be applied,"  
5                   and the terms of 5123 which states that the rule is to  
6                   be applied to operating license proceedings, there  
7                   really is no rational reason to say that it only  
8                   applies to operating reactors with regard to  
9                   amendments or independent spent fuel storage  
10                  installations.

11                  With regard to the 1990 rule, Petitioners  
12                  attempt to discount the reference to new generation of  
13                  reactors. It is true that we don't argue that the  
14                  Commission in discussing the new generation of  
15                  reactors was looking at timing. They were simply  
16                  trying to figure out if a second repository would be  
17                  available to accept the fuel from existing reactors or  
18                  new generation reactors.

19                  However, the point is that's irrelevant.  
20                  In neither the 1984 rule or the 1990 rule, the  
21                  Commission never expressed any doubt that there would  
22                  be sufficient repository capacity available for spent  
23                  fuel. It is simply absent in any of their findings.

24                  So when Petitioners assert that the NRC  
25                  has not expressed confidence, that's completely

1 incorrect. At numerous places throughout the 1990  
2 reconsideration of rulemaking and in 1984, the  
3 Commission states repeatedly that it has confidence  
4 that Congress will provide the needed institutional  
5 support and funding for repository if it is needed.

6 So both in the 1984 rulemaking they  
7 considered new reactors; the 1990 reconsideration of  
8 the rule, they considered a new generation of  
9 reactors. They both apply to future operating license  
10 proceedings, and they never express any doubt that  
11 Congress would provide a sufficient capacity.

12 In 1999, the Commission reaffirmed its  
13 findings without change, and in fact, in 1999, the  
14 Commission had approved the three design  
15 certifications that we've been talking about earlier  
16 today in the earlier contentions.

17 So, again, it was directly on the  
18 Commission's mind that a new generation of reactors  
19 were in the pipeline or potentially in the pipeline.  
20 If there was any doubt that this rule should be  
21 narrowed to exclude those reactors, they would have  
22 done so.

23 In conclusion, with regard to this first  
24 part of the contention, we find no basis in the  
25 language of the rule itself or the history or the

1 original intent, that they never meant this to apply  
2 to new reactors, to new operating licenses, or that  
3 the Commission has expressed any doubt with regard to  
4 spent fuel generation.

5 I'd also like to address briefly  
6 Petitioner's second contention on this issue. They  
7 state that if the waste confidence rule applies to  
8 this proceeding, they think it should be reconsidered  
9 in light of increased terrorist attack, but I'm not  
10 sure if Petitioners have used their opportunity to  
11 address that issue or are going to be proceeding  
12 separately.

13 MS. CURRAN: I'm afraid that I was  
14 thinking so much about the first part of the  
15 contention I didn't address it, and I can do that now,  
16 or it might be better to just do them separately since  
17 they're somewhat different.

18 CHAIRMAN BOLLWERK: All right. Why don't  
19 we go ahead and do that then and treat it separately?

20 MR. BESSETTE: That's all I have to say on  
21 the first part.

22 CHAIRMAN BOLLWERK: Go ahead -- oh, I'm  
23 sorry. Any questions? I'm sorry.

24 (No response.)

25 CHAIRMAN BOLLWERK: All right. Kathryn.

1 MR. FERNANDEZ: Your Honor, it is the  
2 staff's position, like the Applicant, that Petitioners  
3 have not submitted an adequate contention, and in  
4 fact, the contention that they have submitted is  
5 inadequate and in violation of Part 2 violations,  
6 specifically 2.335, which bars petitioners from  
7 attacking specific regulation during the course of a  
8 licensing proceeding.

9 We would like to begin our presentation by  
10 pointing out to the Board on page 16 of the  
11 Petitioners' reply to the staff and Applicants,  
12 particular in this case the Grand Gulf application  
13 that the Petitioners admit that the Applicants and the  
14 staff have adequately characterized 5123 as not  
15 qualified in any regard.

16 And the reason why I point that out is  
17 because Ms. Curran in her presentation, in no form did  
18 she address the regulation, and we believe that that  
19 is of paramount importance in this case.

20 The regulation is what should guide this  
21 Board. The regulation is what controls this  
22 proceeding. The regulation itself is not qualified,  
23 ambivalent or ambiguous in any way. It specifically  
24 says that any reactor is covered by its findings.

25 And as you have heard today, the

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1       Petitioners cannot advance any arguments as to why you  
2       should find that there's any ambiguity in that  
3       language.

4               So prior to embarking on this voyage  
5       through the Statement of Considerations for the 1984  
6       and 1990 and 1999 rulemakings, we would ask the board  
7       that, in fact, this argument that the Petitioners are  
8       making is without any merit unless the Board would  
9       like to make the finding that the word "any" and the  
10      word "regulation," any reactor in and of themselves  
11      have some sort of ambiguity built into them which the  
12      staff would argue that it does not.

13              Additionally, we would argue that an  
14      examination and a thorough review of the regulations  
15      and the Statement of Considerations accompanying these  
16      regulations, there is no such finding that at the time  
17      that the regulations was promulgated the Commission  
18      expected that its ultimate findings regarding waste  
19      confidence were limited to the existing fleet of  
20      reactors at that time.

21              In fact, and we would particularly point  
22      the Board to the 1990 rulemaking, the Commission makes  
23      it clear that clearly on its mind were the next  
24      generation of reactors.

25              We would specifically like to point the

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1 Board to 55 Fed. Reg. 38501, where the Commission  
2 asked in the process of doing our review on the waste  
3 confidence rule: is there sufficient uncertainty,  
4 total spent fuel projections? For example, from  
5 extension of life, renewal of operating licenses for  
6 an additional 20, 30 years, or a new generation of  
7 nuclear reactor designs, that this waste conference  
8 review should consider the institutional uncertainties  
9 arising from having to resort to a second repository  
10 program.

11 And in that question, it's clear that on  
12 the Commission's mind in revisiting its waste  
13 confidence decision, they are considering license  
14 renewal, life extensions, and they are also  
15 additionally considering a new generation of operating  
16 facilities.

17 It is not true and not supported by the  
18 record that they were not considering new reactor  
19 designs, particularly if you would then go on to pages  
20 38503 through 504. The Board -- pardon me while I  
21 read this into the record -- does address new reactor  
22 designs in comparison to waste produced by a new  
23 generation of license renewals.

24 And the Commission goes on to state even  
25 under the conservative bounding assumption of 30-year

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1 license renewals for all reactors, if a repository  
2 were available within the first quarter of the 21st  
3 Century, the older spent fuel could be shipped off the  
4 sites of all currently operating reactors well before  
5 the spent fuel initially generated and then reached  
6 the age of 100 years.

7 Thus, a second repository or additional  
8 capacity of the first would be needed only to  
9 accommodate the additional quantity of spent fuel  
10 generated during the latter years of these reactors'  
11 operating lives.

12 The availability of a second repository  
13 would permit spent fuel to be shipped off site well  
14 within 30 years after expiration of these reactors'  
15 OLS. The same would be true of the spent fuel  
16 discharged from any new generation of reactor sites.

17 That's just one example of where the  
18 Commission specifically had set out in revisiting its  
19 waste confidence finding to analyze what impact would  
20 a new generation of reactors have on the finding that  
21 we've made before and we're reaffirming today at that  
22 point in 1990 and what they said was that the impact  
23 would be similar to what they're doing with their  
24 license renewals.

25 So it's unfair to characterize what the

1 Commission did in the rulemaking as not addressing a  
2 new generation of reactors.

3 I believe Judge Baratta, in questioning  
4 Ms. Curran, was talking about another section in the  
5 1990 Statement of Considerations, and specifically it  
6 was 38501, and we're talking about the no new orders  
7 case.

8 I think it's particularly notable to point  
9 out that the section that Ms. Curran read from was  
10 that with the likelihood that there will be reactor  
11 lifetime extensions and renewals, however, that no new  
12 reactor case probably underestimates the total spent  
13 fuel discharges.

14 In continuing that thought, the Commission  
15 then goes on to say though, "It therefore appears  
16 likely that two repositories will be needed to dispose  
17 of all spent fuel and high level waste from the  
18 current generation of reactors unless Congress  
19 provides statutory relief from the 70,000 MTHM limit  
20 and the first site has adequate capacity to hold all  
21 of the spent fuel and high level waste generated.

22 "The Commission believes that if the need  
23 for an additional repository is established, Congress  
24 will provide the needed institutional support and  
25 funding as it has for the first repository."

1           So it's clear that overall, as the  
2 Commission was examining what it had done previously  
3 in 1984, they were concerned that an initial first  
4 repository may not accommodate all of the waste not  
5 only from the renewal of operating license, but as  
6 stated in the question that they were setting out to  
7 answer in that particular section, also concerned with  
8 a new generation of reactors.

9           And the response from the Commission was  
10 that they believed that Congress would provide for the  
11 institutional support that would be necessary at the  
12 time.

13           Now, this is all to transition back to the  
14 first point, is that all of this is embodied in the  
15 language "any reactor." It is clear as the Applicant  
16 discussed, and I won't belabor the point that the  
17 1984 rulemaking the Commission considered current  
18 operating facilities and future prospective facilities  
19 that hadn't come on line yet, and that in 1990, the  
20 Commission specifically called out a next generation  
21 of designs, a next generation of reactors, and they  
22 considered the fuel generated from there and did not  
23 make any changes as to their finding that any  
24 reactor's spent fuel would be adequately managed.

25           Ultimately this is to say that discussing

1 any of this in this proceeding is a violation of the  
2 regulations. The regulations themselves prohibit any  
3 of the parties to this proceeding to be challenging  
4 any of the Commission's findings with regard to the  
5 issue of ultimate disposal, and that is, in effect,  
6 what the Petitioners are doing in violation and  
7 contravention of 2.335.

8 So the staff would posit that in the first  
9 instance the regulations are clear on their face and  
10 the Petitioners have not provided any evidence that  
11 the words " any reactor" have any ambiguity built into  
12 them, and additionally, that engaging in this  
13 enterprise of reviewing what the SOCs say or do not  
14 say is clearly in violation of 2.335, and the Board  
15 should not attempt to re-review what the Commission  
16 has ultimately to be the rulemaking.

17 Thank you.

18 JUDGE ABRAMSON: Just a point of  
19 clarification. The question that was originally  
20 stated, the Commission answered in those sections that  
21 you read from. The question is is the question that  
22 FERC originally proposed was at the beginning of that  
23 sentence. That's the question they were addressing at  
24 that time.

25 MR. FERNANDEZ: In page 38501, the middle

1 column is a question, lower case B, and that question  
2 is what the Commission goes on to discuss for about  
3 four pages in the Federal Register.

4 JUDGE ABRAMSON: Right.

5 CHAIRMAN BOLLWERK: Does anyone have  
6 anything?

7 (No response.)

8 CHAIRMAN BOLLWERK: All right. Let's go  
9 back to Ms. Curran.

10 MS. CURRAN: I just want to go back to the  
11 structure of this rulemaking notice from the 1990  
12 rule. There's two questions under Section II(B)(2),  
13 Roman two, capital B, two, and this is on page 38501.

14 The first question is: do the issues of  
15 limited spent fuel capacity at Yucca mountain in  
16 definition suspension of the second repository program  
17 and the likelihood that no more than one repository  
18 will be available by 2007 to 2009 undermine the NRC's  
19 1984 showings that "sufficient repository capacity  
20 will be available within 30 years beyond expiration of  
21 any reactor operating license to dispose of existing  
22 commercial high level radioactive waste and spent fuel  
23 originating in such reactor and generated up to that  
24 time."

25 That's Question A, which is answered. The

1 answer to that question begins on page 38501 and goes  
2 on to page 38503.

3 And in that Section A, that's where you  
4 see the discussion of capacity.

5 Section B, II(B), yeah, in Section  
6 II(B) (2), Question small B is: "is there sufficient  
7 uncertainty in total spent fuel projections, e.g.,  
8 from extension of life license amendments, renewal of  
9 operating licenses for an additional 20 to 30 years,  
10 or a new generation of reactor designs, that this  
11 waste confidence review should consider the  
12 institutional uncertainties arising from having to  
13 restart a second repository program?

14 That's where you see them mention advanced  
15 reactor designs, and the answer to that question  
16 starts over on page 38503, which is different in  
17 concept from the question of capacity asked in  
18 Question A.

19 And I admit that it gets a little bit  
20 confusing, but I think you can see two distinct  
21 concepts that are being discussed here. One is  
22 capacity. In other words, will there be sufficient  
23 capacity within X amount of time such that this fuel  
24 can be moved off the sites?

25 And the other one is whether the

1 institutional uncertainties about getting the  
2 capacity, and that's where the Commission mentions  
3 advanced reactor designs.

4 But in terms of making a finding under  
5 NEPA regarding the significance of environmental  
6 impacts of disposing -- actually the issue that the  
7 Commission was looking at was the impacts of storing  
8 spent fuel on site indefinitely. That's where the  
9 capacity issue comes up because they're saying, "Well,  
10 we don't have to store it indefinitely because we're  
11 going to have capacity within X amount of time to get  
12 it off the sites."

13 And in that discussion under Section A,  
14 you don't see any reference to advanced reactor  
15 designs. All you see is in 1984 existing reactors; in  
16 1999 you see existing reactors plus renewal terms.  
17 And you know what this boils down to is this is the  
18 NRC's basically substitute for an environmental impact  
19 statement. This rulemaking is the NRC's way of  
20 complying with NEPA, of addressing these environmental  
21 impacts.

22 That isn't a static exercise that once a  
23 determination is made, it's never revisited again  
24 unless the Commission wants to. It isn't like a  
25 safety regulation where the Commission passes a

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1 regulation and then that's the law; that's the  
2 prescription; and there's no obligation to revisit it  
3 unless the Commission itself decides to do that.

4 As I think the Commission recognized in  
5 the waste confidence rule in 1984, what 51.23 amounts  
6 to is codification of a finding regarding the  
7 significance of environmental impacts under NEPA, and  
8 any finding under NEPA regarding the significance of  
9 environmental impacts has to be subject to being  
10 revisited when the information comes up that shows that  
11 your original assumptions are no longer valid.

12 And that is what has happened here.  
13 That's why the Commission builds in a regular review  
14 of the waste confidence rulemaking. That's why the  
15 Commission has the clause that we mention in a second  
16 waste confidence contention, that if new information  
17 comes up, they're going to look at it.

18 This isn't something that's decided once  
19 and then forever becomes the law, and this is very  
20 well established case law under NEPA, and I believe  
21 that Judge Bollwerk chaired a Licensing Board where  
22 this concept was applied to the issue of environmental  
23 impacts of spent fuel storage in the Sharon Harris  
24 case, where new information was raised creating an  
25 inference that whatever a previous environmental

1 finding had been made was no longer valid, and that  
2 should be admitted for a hearing.

3 That's the context of this contention.  
4 The assumption of the waste confidence rule is that  
5 the body of spent fuel and higher level waste that  
6 we're talking about here amounts to what is being  
7 generated by existing reactor and reactors with  
8 renewed licenses.

9 When these rules were promulgated, when  
10 this NEPA analysis was made, the quantity of fuel  
11 being generated by advanced reactors was not  
12 considered, and until it is, we don't think that the  
13 NEPA analysis for these early site permits can be  
14 considered to be adequate.

15 JUDGE BARATTA: How do you respond -- I  
16 apologize -- how do you respond to the analysis that  
17 was mentioned a moment ago with regards to the 135  
18 gigawatts of electrical and 180 gigawatts electrical  
19 that were predicted for the 2000 time frame and the  
20 1984 time frame?

21 MS. CURRAN: Well, I think what I was  
22 hearing was an argument that this analysis in the  
23 waste confidence rulemaking is conservative because  
24 there's some margin of error that's built in or some  
25 margin of error that's built in or that it can

1 accommodate an additional amount of fuel that's being  
2 generated.

3 And what that sounds like to me is we have  
4 a factual dispute with the Applicant as to whether or  
5 not this determination that was made here is  
6 sufficiently broad to cover the circumstances that  
7 we're talking about.

8 I think that's a factual dispute that  
9 can't be -- I don't think it can be resolved by  
10 lawyers in the context of this oral argument. It's  
11 something that needs to be addressed in the context of  
12 a hearing if that's their position.

13 JUDGE ABRAMSON: well, I heard that as one  
14 point, counselor, but it seems to me that more a  
15 fundamental issue is what does the waste confidence  
16 rule encompass. Does it or does it not encompass  
17 future generations of reactors at the time that that  
18 rule was promulgated?

19 I think that's where we are.

20 MS. CURRAN: Well, yes, and I think that's  
21 the question. Affirmatively, what did the waste  
22 confidence rule -- what did the NRC set out to do? In  
23 that rulemaking what did they do?

24 And I don't see any evidence that when  
25 they were looking at the capacity of these

1 repositories, that they were looking at fuel generated  
2 by advanced reactors.

3 What I thought I heard counsel for Exelon  
4 saying was that it doesn't matter if Petitioners are  
5 right because these capacity figures would take into  
6 account a margin of error. That's what I thought I  
7 heard.

8 JUDGE ABRAMSON: I think that's correct.  
9 That's what Judge Baratta was suggesting, but I think  
10 you also heard from the staff and you heard from  
11 counsel for the Applicant that they disagree with your  
12 interpretation of the rule A and B, that there's this  
13 underlying question of whether the challenge itself  
14 treads impermissibly on Commission existing rules. So  
15 we just have to deal with both of those questions, it  
16 seems to me.

17 CHAIRMAN BOLLWERK: All right. Anything  
18 at this point that anyone wants to say on this point  
19 about the contention? We still have the question of  
20 reconsideration, I guess, although you've sort of  
21 touched on that, I think.

22 MS. CURRAN: A little bit, yeah.

23 CHAIRMAN BOLLWERK: One thing, the  
24 Commission does look at this every five years. So  
25 there is that sort of automatic reconsideration. It

1 sounds as though that you're asking us to essentially  
2 reconsider on our own. That's your point, I take it.

3 MS. CURRAN: That's right. It would be  
4 too long to wait five years. The juncture is now when  
5 the waste confidence rule as it's written now is not  
6 adequate to cover the circumstances of these ESP  
7 applications.

8 And so in order to comply with NEPA, the  
9 Commission has a choice of either addressing the  
10 question in these ESP proceedings or holding them up  
11 while it revisits the question in another waste  
12 confidence rulemaking.

13 And it really is up to the Commission how  
14 it wishes to address the problem. It has proceeded up  
15 to now generically, but NEPA requires that the agency  
16 can't take a federal action unless it has taken a hard  
17 look at all of the environmental impacts, and what  
18 we're saying here is this rule -- the findings  
19 underlying this rule, their breadth is inadequate to  
20 cover the circumstances here, and so further inquiry  
21 needs to be made under NEPA.

22 CHAIRMAN BOLLWERK: Well, let's go in  
23 order here. I have a recollection recently that the  
24 Commission indicated that it had looked at the waste  
25 confidence rule and didn't intend to do anything on

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1 this cycle; is that correct?

2 MR. BESSETTE: If I could add, they last  
3 looked at it in 1999, and they decided that they would  
4 change the reconsideration from every five years to  
5 every ten years based on the slow pace of change.

6 I would like to address a few issues.

7 CHAIRMAN BOLLWERK: Surely, unless someone  
8 has a question.

9 Go ahead.

10 MR. BESSETTE: Just a point of  
11 clarification for a second. We do not believe there's  
12 any factual dispute at all. This is an issue of law.  
13 this waste confidence rule is a rule that applies to  
14 this proceeding. It is not as Petitioner states, some  
15 amorphous form of rule that we get to revise it based  
16 on new information.

17 The rule is clear on its face that it  
18 applies to operating license proceedings, and  
19 therefore it applies here. The issues that we raise  
20 with regard to the 1984 consideration of new reactors  
21 was to dispute the factual assertions of Petitioners  
22 that those facts were not considered at all.

23 The point is the Commission clearly  
24 considered all of these issues in the 1984 rulemaking,  
25 in the 1990 reconsideration, and 1999. Those findings

1 are binding on this Board. We don't get to argue  
2 about those issues.

3 With regard to reconsideration of this  
4 issue essentially what Petitioners are asking for is  
5 a new rulemaking, and if they want to do that, they  
6 can submit a petition for rulemaking. This  
7 adjudication is not the place for us to argue about a  
8 new rule, and either/or, that the Commission has to  
9 either revise -- we have to revise the EIS or the  
10 Commission has to address it in this proceeding is  
11 absolutely incorrect.

12 This is a basic rule. If you want to  
13 revise the rule, you submit a petition for rulemaking.

14 And in any event, Petitioner's basis for  
15 reconsideration, which they have not addressed here,  
16 has already been ruled on by the Commission. Their  
17 basis for reconsideration as noted in their written  
18 contentions is the threat of terrorist activities, and  
19 this is an environmental issue.

20 And in Private Fuel Storage and related  
21 proceedings, the Commission has rules that terrorist  
22 related activities are not within the scope of NEPA or  
23 environmental issues. Therefore, Petitioners are  
24 requesting that the Commission reconsider the  
25 environmental issue and waste confidence rule on a

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1 basis that it firm rejected in Private Fuel Storage  
2 and related issues.

3 So on two bases, the Commission's findings  
4 on the rule itself and the Commission's findings of  
5 the private fuel storage, they are binding on this  
6 Board and they should not be reconsidered.

7 Again, if Petitioners wish to have the  
8 rule revised, they should submit a petition for  
9 rulemaking, and that will be dealt with separately  
10 from this adjudication.

11 CHAIRMAN BOLLWERK: All right. questions  
12 from anyone?

13 Staff?

14 MR. FERNANDEZ: Although the staff is not  
15 currently aware about the reference that the  
16 Petitioners were making with regard to the Sharon  
17 Harris proceeding and what occasion the Board had  
18 there to revisit prior environmental findings, it is  
19 clear as the Applicant has stated that to accede to  
20 the Petitioner's invitation to revisit the underlying  
21 bases of 5123 is exactly what 2.335 is meant to  
22 prevent, and in fact does prevent a Licensing Board  
23 from invading the rulemaking authority of the  
24 Commission.

25 The Boards do not have authority to

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1 revisit findings of regulations or to put themselves  
2 in place of the Commission as a rulemaking authority  
3 that would make generic determinations.

4 There is a rule of generic applicability,  
5 and as such, if the Petitioners have any concerns with  
6 regard to subsequent events, the rule itself, even in  
7 its 1909 (phonetic) revision, identified certain  
8 criteria that the Commission would use to revisit  
9 their findings, and if the Petitioners believe that  
10 such criteria are met regarding the concerns that  
11 they're now faced with, then they should submit a  
12 petition for rulemaking.

13 This is not the forum in which their  
14 concerns should be heard. The proper forum -- and I  
15 think it has become patently obvious today, given the  
16 arguments that they're making -- is that they want a  
17 new rulemaking. Well, unfortunately this is not the  
18 right forum to hear that type of argument, and it  
19 should not be made to this Board because this Board  
20 would not have the authority to promulgate such a  
21 rule.

22 CHAIRMAN BOLLWERK: All right. Any Board  
23 questions?

24 (No response.)

25 CHAIRMAN BOLLWERK: We turn to Ms. Curran

1 then.

2 MS. CURRAN: I just want to clarify that  
3 we're concerned underlying the first contention, the  
4 first waste confidence contention is not limited to  
5 our concerns about vulnerability of spent fuel to  
6 terrorist attacks. We're concerned in general about  
7 the environmental impacts of extended on site storage  
8 of spent fuel. So that's not accurate.

9 I think you have to separate the first  
10 waste confidence contention and the second one.

11 I think I've already addressed the  
12 inappropriateness in our view of applying the  
13 prohibition here against challenging regulations, but  
14 I just want to revisit that again because I think it's  
15 important.

16 In the Vermont Yankee case, the Supreme  
17 Court talked about how the Commission has the  
18 discretion to decide whether to make NEPA decisions in  
19 a case specific context or a rulemaking. In the case  
20 below, the same issue was addressed, NRDC V. NRC, in  
21 State of Minnesota v. NRDC, the same issue addressed.

22 We're talking about factual findings that  
23 the Commission has to make regarding the significance  
24 of environmental impact statements. There is a  
25 continuing obligation on federal agencies when federal

1 actions are pending to evaluate whether or not  
2 proposed actions pose impacts that have not been  
3 previously evaluated.

4 That obligation is independent of the  
5 NRC's other responsibilities to regulate nuclear power  
6 plants. It puts an affirmative obligation on the  
7 agency to reevaluate its previous findings when  
8 information shows those findings have become outdated.  
9 That's what we're talking about here.

10 This is not an appropriate case in which  
11 to apply the prohibition against challenging a  
12 regulation, and we also rely on the specific statement  
13 of the Commissioners in the 1999 nuclear waste  
14 confidence decision that they would revisit,  
15 reevaluate the findings of the waste confidence rule  
16 if significant and pertinent unexpected events occur,  
17 raising substantial doubt about the continuing  
18 validity of the waste confidence findings.

19 Well, these are new circumstances that  
20 weren't considered in the rule.

21 That's all I have on that.

22 CHAIRMAN BOLLWERK: All right. Any Board  
23 questions?

24 JUDGE ABRAMSON: Let me see if I can  
25 formulate this question coherently. Is this accurate

1 to say that you're suggesting that the NEPA  
2 requirement here requires the EIS to look at the  
3 impact on spent fuel storage nationally? Is that  
4 really where you're going with the NEPA challenge?

5 MS. CURRAN: Not necessarily. What we  
6 think is that the EIS for each one of these  
7 applications needs to look at the impacts of extended  
8 spent fuel storage on site.

9 JUDGE ABRAMSON: Because of the  
10 presumption that there won't be suitable off-site?

11 MS. CURRAN: Right, for an extended period  
12 of time. Now, the Commission always has the  
13 discretion to make that inquiry in a generic manner.  
14 The Commission could say we're not going to go case by  
15 case. We're going to do this generically.

16 But the finding has to be made whether  
17 it's case by case or generic, and it has to be made  
18 before the ESPs are issued.

19 JUDGE ABRAMSON: And did I understand  
20 correctly that if hypothetically the waste confidence  
21 rule did apply to these facilities, then there would  
22 not be a NEPA requirement to look at extended spent  
23 fuel storage for each of these.

24 MS. CURRAN: If it could be said that the  
25 findings of the waste confidence rule encompass the

1 fuel generated by advanced reactors, that's right. We  
2 wouldn't have a case.

3 JUDGE ABRAMSON: Okay.

4 CHAIRMAN BOLLWERK: All right. Anything  
5 further you have, Ms. Curran, then at this point on  
6 this?

7 MS. CURRAN: We haven't talked about the  
8 second waste confidence contention, and I may have  
9 used up my time on the first part, but I'm wondering  
10 if we should spend a little time on that.

11 CHAIRMAN BOLLWERK: All right. How quick  
12 can we be? That's a good question. Why don't you  
13 plunge ahead and see if we can do it promptly?

14 MS. CURRAN: Yes. I do think this is an  
15 issue that's probably outside the purview of the  
16 Licensing Board because it raises NEPA issues related  
17 to the threat of terrorism, which is clearly taken out  
18 of the Licensing Board's hands by the Commission, and  
19 the Commission has declared that for various reasons  
20 it does not consider these impacts to be cognizable  
21 under NEPA.

22 But we're asking for reconsideration of  
23 the Commission's position based on the statement of  
24 Secretary Abraham that we cite in our contention, and  
25 we would ask that this issue be referred to the

1 Commissioners for their consideration.

2 CHAIRMAN BOLLWERK: All right. Anything  
3 further at this point?

4 MS. CURRAN: No.

5 CHAIRMAN BOLLWERK: Anything you wish to  
6 say?

7 MR. BESSETTE: My comments with regard to  
8 the Commission's finding on private fuel storage being  
9 binding on this Board, this part of the contention is  
10 beyond the scope of this proceedings still stands.

11 CHAIRMAN BOLLWERK: All right. With that,  
12 any questions at this point?

13 No. Staff.

14 MR. FERNANDEZ: The second contention  
15 assumes that under the side of the Petitioners there's  
16 an assumption that 5123 would apply to this case, and  
17 if 5123 were to apply to this case and they were  
18 seeking a waiver of that regulation, 2.335 is the  
19 controlling regulation and the Petitioners have not  
20 met any of the requirements in that regulation if they  
21 were to seek a waiver of the applicability of 5132.

22 And in fact, under that procedure it's not  
23 clear that that would afford the Commission an  
24 occasion to revisit the regulation. It only says that  
25 the Commission or the Board in the first instance has

1 the authority to waive applicability of the regulation  
2 if it's within the purposes of the regulation to do  
3 so.

4 In fact, the staff's position is that the  
5 Petitioners have not identified any regulatory process  
6 by which in this proceeding they could pursue  
7 basically an attack on the regulations, whether it be  
8 because they feel like terrorism should be considered  
9 by NEPA or whatever other reason.

10 Additionally, we believe that the  
11 Commission's jurisprudence on the issue of terrorism  
12 related impacts and whether they are cognizable under  
13 NEPA is very clear, and to certify that issue to the  
14 Commission would be a waste of the agency's resources,  
15 and the Board should rule based on the clear precedent  
16 that the Commission has established.

17 Thank you.

18 CHAIRMAN BOLLWERK: All right. Any  
19 questions at this point?

20 Then we turn to Ms. Curran then in terms  
21 of rebuttal.

22 MS. CURRAN: Well, I don't agree with Mr.  
23 Fernandez's argument that we needed to submit a waiver  
24 petition. We and the rest of the public have been  
25 invited by the Commissioners to demonstrate

1 significant and pertinent unexpected events that would  
2 raise substantial doubt about the continuing validity  
3 of the waste confidence findings.

4 When the Commission sets up a procedure  
5 like that or tells the public that if X occurs, then  
6 we will reconsider, that seems to me to be an  
7 invitation if you think that X has occurred to present  
8 it. And now we don't need to do a waiver petition.  
9 The Commission has built this into the waste  
10 confidence rule, and I think it's because this is a  
11 NEPA decision.

12 This isn't just an ordinary rulemaking.  
13 This is the way the Commission has said to the public  
14 this decision is not set in stone for all time. If  
15 new information comes up, we're going to consider it,  
16 and we have legitimately invoked that language.

17 That is mentioned in the first sentence of  
18 the basis of the second part of the waste confidence  
19 contention.

20 CHAIRMAN BOLLWERK: Well, I suppose that  
21 there's an argument that that language ought to cover  
22 someone who wants to come in as part of the rulemaking  
23 process and ask for reconsideration rather than in an  
24 adjudicatory format like this one.

25 MS. CURRAN: It's a totally different

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1 standard than a standard for a waiver petition.

2 JUDGE ABRAMSON: What is the format for  
3 you to raise the issue with the Commission? That's  
4 really what you're asking.

5 You're suggesting it's appropriate to  
6 raise it here.

7 MS. CURRAN: Well, we have to start with  
8 you, I think, before we can go to the Commission. We  
9 have to present the issue to the Licensing Board and  
10 from there ask the Licensing Board to refer to the  
11 Commission, and it is appropriate to raise it in a  
12 case specific format.

13 CHAIRMAN BOLLWERK: I mean, there's case  
14 law that says that the agency's choice to proceed by  
15 rulemaking or adjudication. It's not clear to me that  
16 that -- in theory they can file a petition with anyone  
17 at any time they want to, whether it's us or them, and  
18 then it's up to either us or the Commission to decide  
19 what's the appropriate forum.

20 JUDGE BARATTA: What I was asking was that  
21 you could petition the Commission directly if you  
22 want.

23 MS. CURRAN: The last time I did that,  
24 they told me I should have gone to the Licensing Board  
25 first.

1 CHAIRMAN BOLLWERK: All right. Anything  
2 else from any of the parties then?

3 (No response.)

4 CHAIRMAN BOLLWERK: All right. It's about  
5 3:15. Why don't we go ahead and take about a ten-  
6 minute break until 25 after?

7 (Whereupon, the foregoing matter went off  
8 the record at 3:13 p.m. and went back on  
9 the record at 3:25 p.m.)

10 CHAIRMAN BOLLWERK: Before we start with  
11 the next argument, just a scheduling matter I bring up  
12 to the parties. It's now about 3:30 and I think this  
13 next contention will take probably around 40 to 45  
14 minutes or so, something in that neighborhood.

15 We would move at that point to quit for  
16 today and start in the morning with the Lake Anna  
17 impacts and the alternative for Cooling Units 3 and 4.  
18 Those are both again contentions. We understand there  
19 are some folks coming from Grand Gulf and they're not  
20 here yet. They'll be here in the morning and we will  
21 hear the Grand Gulf contentions and then the last  
22 contentions. Any problem with that order of business  
23 at this point?

24 MR. FERNANDEZ: No, Your Honor.

25 CHAIRMAN BOLLWERK: All right, why don't

1 :we plan on doing that then. This contention, clean  
2 energy alternatives, it's Clinton Environmental  
3 Contention 321. Why don't we go ahead and start with  
4 Ms. Curran and see what you have to say about this.

5 MR. FISK: Actually, I'll go.

6 CHAIRMAN BOLLWERK: Okay.

7 MR. FISK: Thank you, Your Honor. This  
8 contention boils down essentially to the fact that  
9 Exelon's Environmental Report doesn't provide an  
10 adequate analysis of alternatives that would enable  
11 and pale to make an informed decision about whether or  
12 not to grant an ESP in this proceeding. The record  
13 demonstrates that Petitioners have submitted an  
14 admissible contention regarding the sufficiency of  
15 Exelon's purported analysis of clean energy  
16 alternatives. In particular, there are three primary  
17 flaws in the Environmental Report's analysis.

18 First, as the staff largely acknowledges,  
19 Petitioners have raised an admissible dispute  
20 regarding Exelon's failure to consider renewal energy  
21 alternatives in combination and to rely on accurate  
22 and up to date information in analyzing such  
23 alternatives.

24 Second, Exelon's failure to consider  
25 energy efficiency alternatives is plainly inconsistent

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1 with the requirements of NEPA.

2 And third, having chosen to identify and  
3 rely on a need for power in the alternatives analysis,  
4 Exelon must analyze and justify its purported need.

5 In order for the Panel to understand the  
6 importance of Petitioner's clean energy alternative,  
7 it's important to keep in mind the purposes of NEPA.  
8 NEPA seeks to protect the environment, not through  
9 substantive requirements, but rather by requiring a  
10 rigorous and objective analysis of proposed action and  
11 all reasonable alternatives to that action. Such  
12 analysis helps ensure that the Panel and the decision  
13 makers here, other relevant government officials and  
14 the public are fully informed about the costs and  
15 benefits of various possible actions so that the best  
16 decisions will be made.

17 For purposes of this proceeding, NEPA  
18 requires Exelon to engage in a rigorous and objective  
19 evaluation of reasonable alternatives to new nuclear  
20 power for meeting the future energy needs in Illinois.  
21 Only by fully examining the costs and benefits of  
22 nuclear power renewable energy and energy efficiency  
23 alternatives can the interested parties make best  
24 informed decisions.

25 Exelon has acknowledged that the

1 consideration of alternative ways to meet future  
2 energy needs is within the scope of this proceeding by  
3 including a discussion of such alternatives in Section  
4 9.2 of its Environmental Report. Unfortunately, the  
5 analysis included therein is factually and legally  
6 flawed and therefore Exelon's application doesn't  
7 provide the analysis required by NEPA and necessary  
8 for informed decision.

9           Turning to the first flaw, as the NRC  
10 staff largely acknowledges in its response, Exelon has  
11 erred in its evaluation of renewable energy  
12 alternatives in two ways. First, Exelon analyzes each  
13 potential alternative to the energy source only  
14 individually, while in their reply they tried to  
15 assert that there was consideration of alternative --  
16 clean energy alternatives in combination. Page 9.2-6  
17 clearly states that Exelon "has not evaluated mixes in  
18 generating sources." Yet, NEPA clearly requires a  
19 consideration of alternatives in combination as part  
20 of a rigorous and objective evaluation.

21           Second, Exelon also relies on outdated and  
22 flawed information and understates the potential for  
23 and overstates the impact of alternative energy  
24 sources. For example, most of the data in the  
25 Environmental Report stems from the early 1990s, yet

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1 many alternative energy sources have advanced  
2 considerably such as wind power in the past 10 to 20  
3 years. This failure to use up-to-date information  
4 violates the requirement in Vermont Yankee versus NRDC  
5 that current information be used in the analysis.

6 Petitioners have submitted a number of  
7 studies that as required by NEPA use up-to-date  
8 information to consider the feasibility of meeting  
9 future energy needs through a combination of renewable  
10 energy resources and therefore we believe we've  
11 submitted an admissible contention on that point.

12 The second shortcoming in the  
13 Environmental Report is a failure to consider energy  
14 efficiency efforts as a reasonable alternative for  
15 meeting future energy needs. Neither Exelon nor the  
16 staff dispute the factual accuracy of Petitioners'  
17 contention that energy efficiency can significantly  
18 reduce future energy needs. Therefore, I've  
19 demonstrated a factual sufficiency of our contention  
20 that energy efficiency is a feasible and cost  
21 effective alternative to nuclear power in this  
22 proceeding.

23 The dispute here turns though on whether,  
24 as Exelon claims, because it either can't or doesn't  
25 want to enact energy efficiency efforts since efforts

1 don't qualify as a reasonable alternative. This  
2 argument is factually wrong. In fact, Exelon's  
3 subsidiary, Commonwealth Edison, is fully capable of  
4 enacting a number of energy efficiency programs that  
5 would help reduce future energy needs.

6 And more importantly, the response  
7 presents an overly cramped reading, but ignores the  
8 critical information valued of the NEPA process. The  
9 primary case here is Natural Resources Defense Council  
10 versus Hodell, which is cited at page 9 of our reply  
11 brief and it's at 865 F.2d 288. In that case, the  
12 Court considered whether Secretary of the Interior had  
13 to consider energy conservation as an alternative to  
14 issuing new oil and gas drilling visas. In response  
15 to the Secretary's contention that they didn't need to  
16 consider energy conservation, the Court noted that the  
17 consideration of all reasonable alternatives is merely  
18 to force the Agency to reconsider its proposed action,  
19 but more broadly to inform Congress, other agencies  
20 and the general public about the environmental  
21 consequences of certain action in order to spur all  
22 interested parties to rethink the wisdom of the  
23 action.

24 We believe that such an analysis is also  
25 appropriate here of alternative energy sources to spur

1 that sort of analysis.

2 Finally, just turning briefly to the third  
3 flaw is the failure to analyze a need for power. Both  
4 Exelon and the NRC staff both note correctly that 10  
5 CFR 52.17 to 52.18 don't require an analysis of the  
6 need for power in the Environmental Report.  
7 Petitioners do believe that those provisions  
8 improperly constrain the analysis required by NEPA,  
9 however, that issue doesn't need to be reached because  
10 Exelon, in fact, has identified a need for power and  
11 in particular, stating that the purpose and need of  
12 this project is to create, is to generate large  
13 sources of baseload power and then uses that need to  
14 eliminate reasonable alternatives. If there's going  
15 to be a full and objective analysis of alternatives,  
16 it's going to be based on a need for power with a net  
17 underlying need for power must be analyzed by the  
18 panel to insure that it actually exists and that it's  
19 the right sort of power, if they identify the need as  
20 actually baseload power as opposed to heating power.  
21 So since Exelon is included in that, falls within the  
22 scope of the contentions.

23 So in closing the record shows that there  
24 is a reasonable contention on this issue and that  
25 Petitioners are entitled to participate in the

1 hearing.

2 CHAIRMAN BOLLWERK: Judge Abramson, do you  
3 have a question?

4 JUDGE ABRAMSON: Yes. I'm a little bit  
5 confused by your comment about Exelon having  
6 identified the need for baseload power?

7 MR. FISK: Yes.

8 JUDGE ABRAMSON: If we assume that that's  
9 the need that this is addressing, then perhaps you can  
10 help me understand how an analysis of wind power, for  
11 example, which is not by any stretch of anybody's  
12 imagination baseload, would be a reasonable  
13 alternative and if it wouldn't be, would it be  
14 sufficient in your mind for Exelon to simply observe  
15 that they're after baseload power and that wind  
16 doesn't satisfy that?

17 MR. FISK: Well, if Exelon is going to be  
18 able to use a need to eliminate alternatives that need  
19 has to be analyzed because as a number of the cases  
20 that are cited in our brief point out, the need -- the  
21 identified need is what I guess directs the need by  
22 not alternative analysis, you may have to make sure  
23 that the need is properly identified.

24 JUDGE ABRAMSON: So you're saying that if  
25 they justify that the niche they're addressing is

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1 baseload, then there's a need for baseload power and  
2 they've justified it that way. Then their NEPA needs  
3 analysis for their NEPA alternative analysis can deal  
4 with alternatives that are not appropriately baseload  
5 without having to do any detailed analysis of it? Is  
6 that accurate?

7 MR. FISK: Well, if the need is properly  
8 addressed and they must consider all reasonable  
9 alternative ways of meeting that need, for example,  
10 wind power in combination with storage mechanisms, can  
11 serve a base power, baseload need.

12 JUDGE BARATTA: A question with respect to  
13 a previous case where your familiar with Vermont  
14 Yankee Nuclear Power versus NRDC?

15 MR. FISK: Yes.

16 JUDGE BARATTA: Because I was under the  
17 impression, thought that one of the outcomes of that  
18 was that the NRC was not required to consider as an  
19 alternative energy conservation or you suggested  
20 energy efficiency.

21 MR. FISK: Well, in Vermont Yankee, the  
22 factual situation here is much different than the one  
23 presented in Vermont Yankee. The Court did note there  
24 that the Agency at that stage improperly determined  
25 that the contentions regarding energy efficiency

1 hadn't met a threshold level to be admitted into the  
2 proceeding. But, for example, the Court recognized at  
3 page 553 that at the time in the late 1960s and the  
4 early 1970s when that proceeding was occurring, that  
5 the expiration of energy conservation, energy  
6 efficiency issues was "uncharted territory." In  
7 comparison now, we submitted numerous studies in our  
8 appendix showing that energy efficiency efforts are  
9 feasible and charted territory.

10 And in addition, at the time, the Court  
11 noted that the Petitioners in the Vermont Yankee  
12 proceeding had declined further focus, their  
13 contentions or to set forth any factual findings on  
14 the issues. That's at page 554 of the proceeding.  
15 Once again, in contrast here, we have submitted  
16 substantial numbers of studies and factual support for  
17 our contention that energy efficiency is a reasonable  
18 alternative. So there is a factual difference.

19 JUDGE BARATTA: And how does that work  
20 with reasonableness and I would suggest that maybe  
21 this because as Exelon has pointed out is an inherent  
22 energy company, not a conservation company. It's not  
23 reasonable.

24 MR. FISK: Well, I mean once again Exelon  
25 does have subsidiaries that can easily do energy

1 conservation and more importantly, you cannot define  
2 a need for a project in a way that eliminates  
3 reasonable alternatives. As the Simmons case points  
4 out and a number of the other cases cited in our Reply  
5 Brief, while the panel must take into account Exelon's  
6 purpose for the project, they can't simply defer to  
7 that purpose in a way that would eliminate otherwise  
8 reasonable alternatives.

9 CHAIRMAN BOLLWERK: Go ahead.

10 JUDGE ABRAMSON: The NEPA alternatives  
11 analysis only requires, as I understand it, an  
12 analysis. Doesn't force any decision making. Is that  
13 correct?

14 MR. FISK: Yes.

15 JUDGE ABRAMSON: So you are alleging that  
16 there is an omission from this which once filled  
17 answers the issue?

18 MR. FISK: NEPA only requires an analysis  
19 which is why it is critical that that analysis is  
20 thorough, objective and based on up-to-date  
21 information which we believe we've shown has incurred.  
22 Because Congress decided to try to protect the  
23 environment through NEPA, through procedural  
24 requirements, rather than substantive requirements,  
25 that much more important that the Environmental Report

1 have a truly thorough analysis that truly considers  
2 energy efficiency and alternative energy supplies  
3 which has not been done here.

4 CHAIRMAN BOLLWERK: Again, just so I  
5 understand your third argument, notwithstanding the  
6 fact that the Agency and regulations that you cited  
7 said that we don't have to consider the -- the Agency  
8 doesn't have to consider the need for power, that your  
9 argument is that because the fourth A, the need for  
10 the power as a justification that then we do look for  
11 a need for power in terms of alternatives.

12 MR. FISK: Yes, if that need is going to  
13 be performed and used to determine the alternatives  
14 analysis, that has to be an option.

15 CHAIRMAN BOLLWERK: Any other questions  
16 from the Board at this point?

17 Let me then turn to the Applicant.

18 MR. FRANTZ: Thank you, believe this  
19 contention should be rejected because it does not  
20 raise a material dispute regarding the reasonableness  
21 of the alternatives to be fit and projectable. I  
22 think we're basically in agreement with all the  
23 parties regarding the applicable law. First of all,  
24 you judge reasonable admissible alternatives, based  
25 upon the purpose of the project.

1           In this regard, the Commission's decision  
2 in Hydro Resources indicates that the Applicants'  
3 economic goals for the project are something that can  
4 be recognized and accountable for in judging  
5 reasonableness of alternatives.

6           We also agree with Mr. Fisk that can't  
7 define the alternatives so narrowly that we exclude  
8 all other alternatives. So there must be some grounds  
9 for considering reasonable alternatives.

10           In our case, the application does define  
11 the goal of the project. The Clinton's Project  
12 purpose is to be a merchant generator that will  
13 generate baseload power for sale in the wholesale  
14 market. This goal is to produce eventually for Exelon  
15 Generation. This goal is not impermissibly narrow.  
16 There are alternatives which will accomplish this goal  
17 that we analyzed in the application such as a coal-  
18 fired plant or a gas-fired plant. So we are not  
19 defining goals too narrowly here. And we fully  
20 evaluate those alternatives under NEPA.

21           Going to the need for power, the  
22 alternatives raised on the Intervenor, Mr. Fisk,  
23 going first to the need for power, I think they'd  
24 almost concede here that under 52.17 and 52.18 of the  
25 regulations need for power is not an issue that needs

1 to be considered here at the ESP stage.

2           However, they seem to want to circumvent  
3 that by alleging that the application itself considers  
4 or addresses the need for power. That allegation is  
5 just factually incorrect. First of all, Section 9.1  
6 of the application clearly states that we are not  
7 addressing the need for power in the application.  
8 That will be deferred to the COL stage.

9           We do mention baseload power, that is not  
10 conventional with a discussion on the need for power.  
11 That's the purpose of our project. Our purpose is to  
12 generate baseload power. So we are assuming a need  
13 for power. We're saying that's the purpose of the  
14 project since this is confusing purpose with need and  
15 I think that disposes of that argument at this point.

16           I'd now like to go on as arguments on and  
17 address the need for baseload power --certainly would  
18 not serve the purpose of the project. As I mentioned,  
19 the project is going to be a merchant generator. Our  
20 goal is to produce baseload power. Conservation will  
21 not accomplish that goal for Exelon on generation.  
22 Obviously, conservation is done or accomplished by  
23 individual consumers out in the marketplace. It is  
24 not accomplished by Exelon Generation. We generate  
25 power. We aren't in the market to conserving power.

1 He attempts to avoid this conclusion by  
2 pointing to Commonwealth Edison in claims that  
3 Commonwealth Edison is one of Exelon's subsidiaries.  
4 That also is not a correct allegation in the context  
5 of this proceeding. The Applicant in this proceeding  
6 is Exelon Generation and that Commonwealth Edison is  
7 not one of our subsidiaries. It's not one of our  
8 parents. In fact, if you go up the corporation chain,  
9 eventually you do come to Exelon Corporation which is  
10 not the Applicant in this case and Commonwealth,  
11 indeed, one of the subsidiaries of Exelon Corporation,  
12 but it is not one of our subsidiaries here.

13 JUDGE ABRAMSON: Is it a sister  
14 subsidiary?

15 MR. FRANTZ: It's an affiliated  
16 corporation. And therefore the activities at  
17 Commonwealth are not at issue in this proceeding.

18 Turning to wind and solar. I think it's  
19 undisputed in this proceeding that wind and solar, by  
20 themselves, are not baseload generators and therefore  
21 they would not serve our purpose and are not  
22 reasonable alternatives to the Clinton project.

23 Now we do agree that perhaps wind and  
24 solar or in combination with air storage mechanisms,  
25 might supply baseload power. And in fact, our

1 application considers that possibility. We reject  
2 that possibility on the grounds of economics.

3 Petitioners have not provided any  
4 allegation or economic analysis that's sufficient.  
5 They've provided no expert opinion on that ground.  
6 They simply have not challenged the statement in the  
7 application that energy storage mechanisms in  
8 conjunction with wind and solar simply are not  
9 economical in the marketplace.

10 The Environmental Report also looks at the  
11 environmental impacts of wind and solar and we show  
12 that the equivalent amount of capacity for wind  
13 require 330,000 acres of land and an equivalent amount  
14 for solar, requiring 330,000 to 77,000 acres of land.

15 The environmental impact is far more significant than  
16 the impact of the Clinton Project itself.

17 We also might point out that with respect  
18 to solar, the Petitioners said not even to contend  
19 that solar is environmentally preferable to nuclear  
20 power.

21 The Petitioners attempts to escape some of  
22 that by saying that if do solar as a distributive form  
23 of power that would not have such tremendous land  
24 impacts, for example, installing solar panels on  
25 individual buildings. But again, that's not our

1 business as Exelon Generation. If an individual owner  
2 of a building wants to solar panels, that's his  
3 business. That's not our business and it's not the  
4 purpose of the Clinton Project and therefore, this  
5 kind of distributive generation is not a reasonable  
6 alternative to the Clinton Project.

7 Petitioners also argue that we used  
8 outdated information in the application, but their  
9 contention does not identify a single statement in the  
10 application that it's outdated. They provide no facts  
11 at all, nor ask for opinions to demonstrate that  
12 anything in the application is outdated. They make  
13 this statement that they rely on the general  
14 environmental impact statement for 1996. They don't  
15 identify anything in that statement that is outdated  
16 or that we use that's outdated in the application.

17 And finally, turning to combinations of  
18 sources, they claim that we have not considered  
19 combinations and I certainly agree that we not  
20 provided an exhaustive consideration of combinations  
21 of alternatives, but we have provided some. And I  
22 think a sufficient amount of discussion. In  
23 particular, as I mentioned before, we have considered  
24 wind and solar in combination with energy storage  
25 mechanisms, so we have done that analysis and shown

1 that's not economically viable.

2 We have also considered conservation as a  
3 means for reducing demand, not necessarily totally  
4 eliminating demand, but at least reducing demand. So  
5 again, we have considered that as one possibility in  
6 connection with other means for satisfying the natural  
7 power.

8 We do look, as the Commission points out,  
9 the equivalent to capacity for wind and solar, for  
10 example, we have looked at a 2000 megawatt nuclear  
11 plant and equivalent amounts of wind and solar.  
12 That's to give you an apples to apples comparison,  
13 something you might want to look at. It would not be  
14 appropriate to judge the environmental impact of say  
15 solar using 100 megawatts solar versus 2000 megawatts  
16 from the Clinton nuclear project. You need to  
17 consider them on the same normalized scale in order to  
18 do an accurate evaluation or comparison of the  
19 environmental impacts.

20 And in sum, I think if you just look at  
21 all of the allegations, they don't serve a purpose of  
22 our project which is to generate baseload power for  
23 the wholesale market and that's where all the  
24 alternatives should be rejected under NEPA. Thank  
25 you.

1 JUDGE ABRAMSON: Questions? I'll turn to  
2 the staff.

3 MR. SMITH: Thank you, Your Honor. There  
4 are two primary aspects of Petitioners' proposal  
5 retention that the staff proposes and those relate  
6 primarily to one, the need for power, and two, the  
7 discussion of the alternative energy sources. More  
8 specifically, the Petitioners have acknowledged in  
9 their contentions and their reply and again today in  
10 oral argument, the applicability of NRC regulations  
11 that provide that an applicant need not discuss the  
12 need for power at ESP stage. Nevertheless, they're  
13 arguing that these contentions should be admitted  
14 despite the regulations that expressly preclude an  
15 attack on the Commission's regulations in a hearing.  
16 This ESP hearing is simply not the forum for  
17 addressing their concerns with regard to the need for  
18 power.

19 Petitioners go on to compound the  
20 admissability of their contentions by attempting to  
21 redefine the purpose and need to broaden the  
22 alternatives analysis to include consideration of the  
23 need for power and energy efficiency. Instead, their  
24 consideration of alternatives is necessarily limited  
25 to those that will reasonably bring about the goals of

1 the action, shaped by the application, and involve the  
2 Agency in the process.

3 As the Commission has said recently in  
4 Hydro Resources and in other situations, the Agency  
5 may take into account the economic goals of a project  
6 sponsor, balanced by the NRC's role of assuring that  
7 all applicants meet the applicable regulatory and  
8 statutory requirements.

9 Put simply, the Petitioners cannot rewrite  
10 the goals and purpose and need of the project to  
11 satisfy their needs while ignoring those of the  
12 Applicant.

13 But more fundamentally, the Petitioners  
14 seem to misconstrue the nature of the Environmental  
15 Report and NEPA for ESP process. As we heard from  
16 Petitioners' counsel, NEPA requires at its basic level  
17 an assessment of the environmental impacts of the  
18 proposed action. And some sort of informal balancing  
19 of the costs and benefits of those actions.

20 For a site permit, the Commission has  
21 described the benefits of the action as early  
22 resolution of citing issues related to tank sites,  
23 increased certainty and along those lines. But as to  
24 the environmental impacts, the ESP, apart from perhaps  
25 some limited work authorizations doesn't really

1 authorize any construction or authorization. It  
2 doesn't really have any environmental impacts.

3 So the Commission, in its regulations, has  
4 gone on and required additional requirements at the  
5 ESP phase. They said you need to include a discussion  
6 of the environmental impacts of construction and  
7 operation at the proposed site. But unlike the  
8 environmental impacts, the Commission didn't require  
9 a discussion of the benefits at the ESP stage, that is  
10 need for power, which is sort of the classic  
11 formulation or shorthand for the benefit in an NRC  
12 license application.

13 And this is where this case becomes  
14 important is that and brings us down to alternative of  
15 energy source considerations and that is energy  
16 efficiency is relevant to two distinct aspects of this  
17 analysis. One aspect is intertwined with the need for  
18 power which Applicant did not address in the ESP  
19 application. The Commission said you don't need to  
20 address, you don't have to address that at the ESP  
21 stage.

22 ESP is also referenced in a combined  
23 licensed or similar type of proceeding. There, you  
24 will need consider the need for power. If efforts to  
25 increase energy efficiency or accrue conservation have

1 had an effect between now a such a time, those will be  
2 reflected in the need for power and takes place at  
3 that time.

4 At this time, the need for power does not  
5 involve to the extent energy efficiency is intertwined  
6 with the need for power, it does not need to be  
7 considered at the ESP stage.

8 Now the other aspect that involves energy  
9 efficiency is the considerable of alternative energy  
10 sources which Exelon did choose to address in the  
11 application, even though the Commission didn't require  
12 them to do so at this stage. In that context, the  
13 energy that would be generated by a new reactor, the  
14 alternatives considered ways in which that energy  
15 could be replaced either through some other generation  
16 method, or in the case of the no action alternative,  
17 by other means which include purchasing power,  
18 conservation, demand management or energy efficiency.

19 So the extent of the proposed contention  
20 is based on an omission of a discussion of energy  
21 efficiency from a legal standpoint. And the end  
22 result is that there's no legal requirement to  
23 consider energy efficiency beyond what is already in  
24 the Environmental Report as part of the discussion of  
25 the alternative energy sources and just sort of

1 intends to wrap need for power and energy efficiency  
2 into the alternatives discussion at the ESP phase is  
3 simply incorrect.

4           Finally, there are two portions of  
5 Petitioners' reply where they've misrepresented in a  
6 small way staff's position with regard to the  
7 admissability of proposed contentions. First, staff  
8 does oppose portions of the proposed contentions  
9 regarding failure to consider certain energy sources  
10 in combination. We did not oppose a contention as it  
11 relates to the specific combination of wind power,  
12 solar power, extruded generation and clean coal.  
13 Again, we oppose the remainder of that contention  
14 because the ER does consider some of the environmental  
15 impacts in combination. For instance, Section 9.2.2,  
16 the impacts from coal and gas-fired generation in this  
17 chapter bound the impacts from any mixture of the two  
18 technologies. They considered wind and solar power in  
19 conjunction with storage mechanisms and they  
20 considered purchased power, energy efficiency,  
21 conservation and land management as part of the dual  
22 action alternative.

23           Thus, to the extent the proposed  
24 contention is based on an admission to consider  
25 combinations, it is admissible.

1           Second, the contention on staff's position  
2 on environmental reports relied on flawed and outdated  
3 information, we oppose the admission and contention  
4 except for a few limited situations. And those are  
5 with respect to wind power and that is the power  
6 output of wind power, the cost of wind power, the land  
7 use impacts of wind power and bird collisions with  
8 wind power.

9           And with respect to the analysis of solar  
10 power, the staff did not oppose the proposed  
11 contention with respect to the admissability, excuse  
12 me, the possibility of distributed solar generation  
13 through the installation of solar units on roofs and  
14 other buildings.

15           As for the remainder of their proposed  
16 contentions with regard to wind and solar power,  
17 Petitioners do not demonstrate a genuine dispute of  
18 material issue and fact and the contention should be  
19 inadmissable.

20           That's all I have.

21           CHAIRMAN BOLLWERK: With respect to the  
22 solar power, we've just heard it argued that they  
23 really can't be held responsible for distributed solar  
24 power because they don't control that. And a  
25 variation on their argument is you're trying to

1 generated baseload to do other things. What is your  
2 response?

3 MR. SMITH: That load may be, but it was  
4 not discussed in the Environmental Report.

5 JUDGE BARATTA: What you're saying then  
6 it's an error of omission?

7 MR. SMITH: We are not opposing it with  
8 respect to the fact that the ER does not discuss  
9 distribution of its own power.

10 JUDGE ABRAMSON: Does it extend to an EIS  
11 on the ESP?

12 MR. SMITH: Yes, Your Honor, we will.

13 JUDGE ABRAMSON: And will you then be  
14 submitting RAIs to the Applicant to fill in this kind  
15 of information? How will you do your EIS?

16 MR. SMITH: One possible way which we've  
17 addressed this is through submitting requests for  
18 information to the Applicants. The Staff also has an  
19 independent duty to evaluate the environmental impacts  
20 of the project and that will be reflected in the  
21 environmental impact statement.

22 JUDGE ABRAMSON: Is it the Staff's view  
23 that reasonable alternatives in this instance would  
24 look only to matching up a baseload plant?

25 MR. SMITH: As an initial matter, that

1 seems to begin to tread on the merits a little bit as  
2 to what the Staff's position is with regard to  
3 reasonableness as to certain alternatives. So I don't  
4 want to address that part of the question.

5 The Staff will look at all the  
6 alternatives and determine which ones may or may not  
7 be reasonable, based on a variety of alternatives.

8 JUDGE ABRAMSON: Let me just ask this so  
9 I can understand this. Do I understand correctly that  
10 the Staff's view is that it is appropriate for a  
11 generation company to establish its goal and that that  
12 goal would be an important factor in determining what  
13 are reasonable alternatives?

14 MR. SMITH: Yes, Your Honor, that's  
15 correct.

16 CHAIRMAN BOLLWERK: Let me ask the  
17 Applicant a question. You heard what the Staff said  
18 about distributed solar power. Do you have any  
19 response to that? They said you didn't talk about it  
20 at all, therefore --

21 MR. FRANTZ: I think the answer was pretty  
22 simple there. It was not an alternative that would  
23 serve our purpose. We aren't under an obligation to  
24 consider every conceivable alternative out there that  
25 will serve our purpose. If it's not a reasonable

1 alternative, we're under no obligations to address it.

2 CHAIRMAN BOLLWERK: Again, anything  
3 further Staff wants to stand up on?

4 MR. SMITH: No, Your Honor.

5 CHAIRMAN BOLLWERK: Any other questions  
6 from the Board at this time?

7 I guess I'll turn it over for rebuttal  
8 then.

9 MR. FRANTZ: I think there has been a lot  
10 of talk about you have to take into account Exelon's  
11 purpose here in setting the purpose and need for the  
12 project. And the case law does say take into account,  
13 but it doesn't say blindly defer to the identifying  
14 purpose and need. You cannot completely limit the  
15 consideration of reasonable alternatives which we have  
16 shown include energy efficiency, renewable energy  
17 sources by simply completely deferring to the project  
18 Applicants' defined purpose and need in order to serve  
19 the informational purpose of Hodell and also to  
20 rigorously explore all objective alternatives as  
21 required by NEPA and thus the purpose and need must be  
22 broad enough to allow for that.

23 So for example, here, the purpose and need  
24 is how they meet future energy needs in Illinois, not  
25 necessarily the unsupported claim that there has to be

1 additional baseload power.

2 Also, the argument that well, installing  
3 distributed solar generation is beyond Exelon's power,  
4 the case law is clear that alternatives, feasible  
5 alternatives that are beyond the authority of the  
6 Applicant, must be considered also. With support of  
7 that I'd point to the Muckleschutt versus U.S. Forest  
8 Service case and also 40 CFR 1502.14 and the CEQ's  
9 response to the 40 Frequently Asked Questions about  
10 NEPA which is all cited at pages 8 and 9 of our reply.

11 In terms of the need for power, i would  
12 just reiterate that we do believe that it's improper  
13 to - -it doesn't make sense under NEPA to be doing a  
14 NEPA analysis of alternatives without analyzing what  
15 they need here. One goes along with the other and  
16 since Exelon has identified an apparent need, purpose,  
17 whatever you want to call it, that has to be  
18 addressed.

19 In terms of wind and solar, we identified  
20 a number of errors in the Applicant's analysis of  
21 wind, solar and distributed generation, clean coal,  
22 primarily the reliance on outdated information. For  
23 example, they point to the economics of wind, citing  
24 a study from 1993 which presumably the information is  
25 from even before then. In our appendix, listing of

1 the cost for wind power, it's now 3 to 5 cents a  
2 kilowatt power which is cheaper than nuclear.

3 Also, another example is in terms of the  
4 land impacts. Three hundred thirty-thousand acre wind  
5 farm would be required to replace a post- Clinton 2  
6 nuclear plant. Well, that 95 percent of the land as  
7 we cite in the studies of our appendix is useable for  
8 other sources. So that number, the 330,000 is  
9 actually down to -- around 16,000 and in addition,  
10 that number is based on the theory that most turbines  
11 are one to one and a half kilowatt hours while the  
12 citation in our appendix shows that today turbines are  
13 up to 2.5 to 3. So that takes in account now even  
14 farther. The actual maintenance impact is closer to  
15 8,000 acres, not 330,000 which is a significant  
16 difference.

17 And in terms of combination, it's clear,  
18 the case law is clear that you must consider all of  
19 these alternatives in combination, not just as  
20 separate alternatives and must each meet the entire  
21 demand. Perhaps distributed generation cannot all  
22 meet the entire amount of power that can be reproduced  
23 by the Clinton 2 plans, but wind, solar, distributed  
24 generation, energy efficiency and clean coal as we  
25 have shown and believe brings a significant material

1 dispute regarding the material issue of fact on this  
2 issue than is entitled to consideration of events.

3 That's all I have.

4 CHAIRMAN BOLLWERK: In terms of purpose  
5 and need, both parties cited the Commission's HRI  
6 case. Did you distinguished HRI or what does it say  
7 about that?

8 MR. FISK: Well, in terms of that case and  
9 also the Bussey case, I believe the language in there  
10 is taken into account which is different from simply  
11 go along with what the Applicant wants. And the  
12 example I would say is Simmons, and cases like that  
13 where, you know, if the Applicant -- just because the  
14 Applicant wants one specific thing, if that's too  
15 narrow that you can -- too narrowly defines the  
16 alternatives, then the Agency still has an independent  
17 legal duty to assess whether that purpose and need is  
18 proper and whether other alternatives should be  
19 considered.

20 CHAIRMAN BOLLWERK: So essentially, taken  
21 into account means there has to be a reasonable  
22 judgment by the Agency whether they have properly  
23 defined the purpose and need?

24 MR. FISK: Yes, and whether that allows  
25 for a full consideration of all reasonable

1 alternatives.

2 JUDGE ABRAMSON: I'm still -- perhaps you  
3 can help me understand what this argument boils down  
4 to again. We have an applicant who's in the  
5 generation business and that's their own business, so  
6 assume it manufactures widgets. They came to us for  
7 license to manufacture widgets. Under NEPA would they  
8 be required to examine the manufacture of computers?

9 MR. FISK: Well, computers would not  
10 address, presumably would not address the --

11 JUDGE ABRAMSON: Let me be a little more  
12 succinct. This is not a state agency that's come to  
13 us with an application. It's not working for the  
14 benefit of the State of Illinois. It's working for  
15 it's own private goals. I'm trying to comprehend  
16 where we draw the line in requiring them to analyze  
17 alternatives when they have a clear business purpose  
18 and when we are presumably making the major federal  
19 action which would be the granting of the license,  
20 and yet, doing it in the context of an application for  
21 a specific business purpose.

22 So perhaps you can help me understand how  
23 this adds together?

24 MR. FISK: The underlying justification  
25 for the plant, for a new plant has to be serving

1 energy needs and there are various ways to serve those  
2 energy needs, future energy needs, so that one  
3 reasonable alternative for doing that is energy  
4 efficiency. And as an independent government agency,  
5 it has to decide whether or not a new plant 2 nuclear  
6 plant is the right thing or not. That analysis has to  
7 include other alternatives in order to serve  
8 informational purposes.

9 JUDGE ABRAMSON: But informational  
10 purposes solely, as I understand it, right? It does  
11 not direct the decision making of the Nuclear  
12 Regulatory Commission. It only informs the judgment.

13 MR. FISK: It informs the judgment as to  
14 whether or not it is a good idea to issue the ESP for  
15 the proceeding.

16 JUDGE ABRAMSON: I'm not sure I know how  
17 to put that interpretation -- a good idea to issue --

18 MR. FISK: Whether or not issuance is --

19 JUDGE ABRAMSON: Am I incorrect in  
20 interpreting the NEPA alternatives analysis  
21 requirement to simply require the analysis, but to  
22 place thereafter no restriction on the federal  
23 agency's judgment?

24 MR. FISK: Assuming the analysis properly  
25 done and if the decision, if the analysis is not

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1 arbitrary and capricious. But it informs - -that  
2 analysis informs as the notice for the Exelon  
3 proceeding here from the Federal Register of December  
4 12th, it says whether in accordance with the  
5 requirements of 10 CFR Part 51, the ESP should be  
6 issued as proposed. It forms that analysis. Whether  
7 or not there are better alternatives --

8 JUDGE ABRAMSON: Anything from the  
9 Applicant?

10 MR. FRANTZ: Just very quickly. You heard  
11 Mr. Fisk just redefine the purpose of the project. He  
12 said the purpose of the project is to supply the  
13 energy needs of Illinois. Again, I think he  
14 misconstrues the purpose and the nature of the  
15 Applicant here. We are not the utility. We don't  
16 have a service territory. We aren't required to meet  
17 the needs of anybody. All we're required to do --  
18 we're not required to do anything, as a matter of  
19 fact. All we need to do is generate power and sell  
20 it. If, for example, at the COL stage we have a  
21 contract to supply power, the purpose, that's all we  
22 need to show. We don't even need to show need for  
23 power in the State of Illinois if we have that  
24 contract in hand at the COL stage.

25 So again, our purpose is just to generate

1 baseload power for sale. That is the purpose we state  
2 in the application. That is not unreasonably narrow.  
3 Mr. Fisk refers to the case in Simmons, but Simmons  
4 really is not applicable here. Simmons was a case  
5 where the purpose was defined so narrowly that there  
6 were no alternatives. That's not the case here and we  
7 have not defined the project, purpose that narrowly.  
8 In fact, we do agree that there are alternatives such  
9 as coal and gas which would supply, serve the purpose  
10 of this project.

11 So we believe that we have a reasonable  
12 purpose, that the alternatives mentioned by the  
13 Petitioners would not accomplish that purpose and  
14 therefore should be rejected.

15 CHAIRMAN BOLLWERK: Well, I think I just  
16 heard Exelon saying it's a child to deregulation.  
17 What's your response to that? You don't have to take  
18 that characterization --

19 (Laughter.)

20 MR. FISK: I would say that NEPA still  
21 requires that stepping back analysis to make sure that  
22 the decision is fully informed and that everybody  
23 including the public understands and has all of the  
24 information in hand before decisions are made.

25 JUDGE ABRAMSON: And it boils down to what

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1 are reasonable alternatives that need to be looked at.

2 Is that correct?

3 MR. FISK: Yes.

4 CHAIRMAN BOLLWERK: Anything further? All  
5 right, thank you very much. We appreciate it.

6 At this point, we have four more  
7 contentions to do. We will -- five more contentions  
8 to do; two dealing with North Anna, environmental  
9 impacts and alternatives for cooling units 3 and 4;  
10 two for Grand Gulf and impacts from minority and low  
11 income community and also emergency planning. And  
12 then one for the Illinois state moratorium.

13 We'll hear those arguments on those  
14 contentions tomorrow morning beginning at 9:30 back in  
15 this room. If the parties have nothing at this point,  
16 and hearing nothing, then we will stand adjourned  
17 until 9:30 tomorrow morning.

18 Thank you very much.

19 (Whereupon, at 4:13 p.m., the initial  
20 prehearing conference was adjourned, to reconvene  
21 tomorrow, Tuesday, June 22, 2004 at 9:30 a.m.)  
22  
23  
24  
25

CERTIFICATE

This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission in the matter of:

Name of Proceeding: Early Site Permits

Pre-Hearing Conference

Docket Number: 52-007-ESP et al.

Location: Rockville, MD

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken by me and, thereafter reduced to typewriting by me or under the direction of the court reporting company, and that the transcript is a true and accurate record of the foregoing proceedings.



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Matthew Needham  
Official Reporter  
Neal R. Gross & Co., Inc.