

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: South Texas Project Nuclear Company
Units 3 and 4
Closed Session

Docket Number: 52-012-COL and 52-013-COL
ASLBP Number: 09-885-08-COL-BD01

Location: Rockville, Maryland

Date: Friday, November 13, 2009

Work Order No.: NRC-3211

Pages 598-758

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DOCKETED
USNRC
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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

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BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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HEARING

CLOSED SESSION

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In the Matter of: :
SOUTH TEXAS PROJECT NUCLEAR, : Docket Nos. 52-012-COL
OPERATING COMPANY : and 52-013-COL
(South Texas Project :
Units 3 and 4) : ASLBP No. 09-885-08-
: COL-BD01

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Friday, November 12, 2009

Nuclear Regulatory Commission
Hearing Room T-3B45
11545 Rockville Pike
Rockville, Maryland

BEFORE:

MICHAEL M. GIBSON, Chair
GARY S. ARNOLD, Administrative Judge
RANDALL J. CHARBENEAU, Administrative Judge

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10:56 A.M.

JUDGE GIBSON: Is there a reason why the door is open there? Can someone close it, please?

MR. FRANTZ: Can we also confirm that the camera is not running.

JUDGE GIBSON: Yes, make sure that's turned off. I assume no one has any, other than the court reporter, no one is recording, seeing that it's closed? Okay.

MR. EYE: Your Honor, may we take up one more housekeeping item? The housekeeping keeps popping up.

I've been asked to participate in a phone hearing with a federal magistrate that begins at 12 o'clock our time. Could we plan on breaking right about a couple of minutes before noon to accommodate the request that I participate in that particular hearing?

JUDGE GIBSON: Of course, of course. No problem.

MR. EYE: Thank you.

JUDGE GIBSON: What time is it not?

MR. EYE: It's just about 10 or a couple of minutes before. I'm sorry, in central -- I'm still

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1 on Kansas time. It's a little before 11. So if we
2 can break just a couple minutes --

3 JUDGE GIBSON: If you would just let us
4 know, Erica, we'll just --

5 MR. EYE: Thank you, I appreciate it.

6 JUDGE GIBSON: I never want to keep a
7 federal magistrate holding.

8 MR. EYE: It's not the proper care and
9 feeding as it turns out. So thank you.

10 JUDGE GIBSON: Just to confirm, everyone
11 in the courtroom is either with NRC, the ASLBP or
12 signed a nondisclosure agreement, correct? Okay.
13 Thank you.

14 I think what we'll do is go back, circle
15 back to contention 1 now and I won't -- I apologize if
16 I have some repetition, I'll try to avoid it, if we've
17 already gotten a full answer, but unfortunately, it
18 appears that a lot of those answers implicated SUNSI
19 material, so Mr. Eye, on contention 1, you've
20 expressed concern that the Applicant has failed to
21 describe the fires and explosions that would result in
22 the full spectrum of damage states specifically
23 involving the impact of a large, commercial airline,
24 correct?

25 MR. EYE: Specifically with the magnitude

1 and numbers of the fires and explosions, yes.

2 JUDGE GIBSON: Okay. We have talked about
3 (hh)(2), I believe, but -- and the fact that it
4 doesn't contain the language "full spectrum of damaged
5 states". Likewise, we indicated earlier that in the
6 Statement of Considerations, the term "full spectrum
7 of damaged states" is not included, but you indicated,
8 I believe that a document referenced in the Statement
9 of Considerations does mention this phrase.

10 Could you please explain to us what that
11 is and why you believe it supports your position?

12 MR. EYE: Thank you, Your Honor. Yes, in
13 the Statement of Considerations, as we've mentioned
14 earlier in today's proceeding there is a reference to
15 NEI 06-12, as a means by which applicants can meet the
16 requirements of 50.54(hh)(2). Without agreeing or
17 disagreeing whether that's an adequate document to
18 meet the requirements, the language "full spectrum of
19 damage states" comes out of the disclaimers in 06-12.
20 And those disclaimers are contained on page 1 in the
21 Introduction to 06-12. And it's the last bullet point
22 that is the summary of the disclaimers on page 1.

23 (b)(4)
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Exemption 4 NEI

(b)(4)

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JUDGE GIBSON: Okay, "full spectrum of potential damage states." That's in the bullet. And you say that's in the disclaimer?

MR. EYE: Well, that's how I characterize the bullet points as disclaimers. These precede the prescriptive methods in 06-12. In other words, the prescriptive methods say do these things, but the disclaimer say, particularly in that particular bullet point that doing all the prescriptive methods that are outlined in the document, will not ensure success under the "full spectrum of potential damage states".

So to me, that's a qualification or a disclaimer, irrespective of how it's characterized in terms of the terminology. It's putting the user of this document on notice and everybody else that's privy to this on notice that you can do everything that's prescribed in that part of NEI 06-12. And you still may face the situation that you can deploy all the fire suppression and all the things that are prescribed in there, and not be able to deal with the situation adequately, that there are potential damaged states to which these prescriptive methods will not be effective.

1 JUDGE GIBSON: Okay. Mr. Frantz, do you
2 see it the same way?

3 MR. FRANTZ: To a certain extent. First
4 of all, they are not classified as disclaimers as Mr.
5 Eye pointed out. The document itself calls them
6 "high-level insights."

7 JUDGE GIBSON: "High-level insights"?

8 MR. FRANTZ: Yes, based upon experience
9 with the first hundred and some operating plants. To
10 put this in context, this document was based upon the
11 experience of the first hundred operating plants in
12 (b)(5)(B) of the 2002 security orders; (b)(5)(B)
13 eventually was the genesis of the rule that we have
14 today in 50.54(hh)(2).

15 And so based upon implementation of
16 (b)(5)(B), this guidance document NEI 06-12 was
17 developed. And so it reflects what happened with the
18 first hundred plants who had to implement it and
19 comply with the 2002 security orders.

20 JUDGE GIBSON: Was that previously in an
21 appendix to a draft appendix to part 73, I think?

22 MR. FRANTZ: That's correct, Judge Gibson.
23 It was a proposed rule to add this to I believe it's
24 appendix C to the part 73 and it was eventually moved
25 into 50.54.

1 JUDGE GIBSON: Okay.

2 MR. FRANTZ: Mr. Eye is correct and
3 basically quoting from a document that it's not
4 possible to mitigate a full spectrum of damage events.
5 I think it only states the obvious. There are certain
6 events that it is impossible to mitigate. It's a
7 simple and perhaps absurd example, if there was an
8 explosion of an atomic bomb, I don't think there's
9 anything that anybody could do that's going to be able
10 to mitigate that event. And you can all obviously
11 postulate other explosions and fires, if you want to
12 go to absurd levels. That would be impossible to
13 mitigate.

14 So this is only stating the obvious. And
15 there's no requirement in the rule or in the Statement
16 of Considerations to be able to mitigate a full
17 spectrum of events. In fact, looking at the Statement
18 of Considerations for the rule, it explicitly states
19 that the mitigated strategies only need to use
20 "readily available resources" and "practicable
21 measures." There's no requirement that we mitigate
22 everything. We're only required to use practical
23 measures and reasonably available resources.

24 And I refer the Board here to 74 Federal
25 Register at 13928 and 13957. And by the way, these

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1 two phrases are also used in the proposed rule at
2 various places. And so Mr. Eye's criticism of NEI 06-
3 12 I don't think it well taken. There is simply no
4 requirement in the rule to be able to mitigate a full
5 spectrum of events.

6 JUDGE GIBSON: Staff, do you have anything
7 to add?

8 MS. BIELECKI: I would concur with the
9 Applicant that the plain language of the rule --

10 JUDGE GIBSON: Can you speak into the
11 microphone, please?

12 MS. BIELECKI: Sorry about that. Is that
13 better? I would concur with the Applicant that the
14 plain language of the rule does not require an
15 Applicant to specify the full spectrum of damaged
16 state.

17 I would point the Board's attention to the
18 first bullet on the page of NEI 06-12 that the
19 Intervenors are quoting which states "prediction of
20 precise damaged states, plant and conditions, and
21 associated plant response is not possible, even on a
22 site-specific basis." And that's consistent with the
23 Commission's statement in the proposed rule where they
24 also state that the NRC does not believe it is
25 necessary or even practical that the prescription

1 suggested by the stakeholders -- this is in reference
2 to the fires quote that we were talking about earlier
3 -- be incorporated in 50.54(hh).

4 And I think I would also like to point out
5 that effectiveness, the way the staff determines
6 effectiveness when reviewing these strategies is well
7 focused on redundancy, flexibility, and diversity of
8 the programs as is suggested in NEI 06-12. Nowhere
9 does the rule state that an applicant must be 100
10 percent successful at mitigating the full spectrum of
11 damaged states.

12 JUDGE GIBSON: We had a discussion earlier
13 in open session regarding the fact that we had the --
14 expressio unius est exclusio alterius issue where you
15 have the airline -- the aircraft described in (h) (1)
16 and not in (h) (2), but then you have some I guess some
17 language in the Statement of Considerations to (h) (2),
18 proposed (h) (2) that talks about aircraft.

19 How do you see that being resolved
20 appropriately? Because it seems to me that's one of
21 the things that we're facing here.

22 MS. BIELECKI: Well, I would focus on the
23 Commissions statements in the Statement of
24 Considerations for the final rule where they make
25 statements indicating that (h) (h)2 is focused on a

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1 variety of beyond design basis events including, but
2 not excluding aircraft impact. So what an applicant
3 is to do is to consider large velocity areas
4 regardless of the cause and be able to have redundant,
5 flexible, diverse, mitigative measures to address
6 large losses of areas of the plant and not necessarily
7 focus on whether it's caused by an aircraft impact or
8 whether it's one aircraft, three aircrafts, whether
9 it's a bomb. It's not focused on the initiating
10 event. It's large loss of the area and how are you
11 going to have diverse and flexible programs to
12 mitigate that.

13 JUDGE GIBSON: Even if the word aircraft
14 is used as a specific example? Isn't it the only one
15 that's used in that language in the Statement of
16 Considerations?

17 MS. BIELECKI: The Commission says on page
18 13957, "the requirements described in 54(hh) relate to
19 the development and procedures for adjusting certain
20 events that are the cause of large fires and
21 explosions that affect a substantial portion of the
22 nuclear plant and are not limited to or directly
23 linked to an aircraft impact."

24 So the focus -- we see the focus as any
25 beyond design basis event regardless of the initiating

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1 factor, but it's going to result in a large loss of
2 area to the plant and how are you going to mitigate
3 that?

4 MR. FRANTZ: Judge Gibson, if I could also
5 add one thing?

6 JUDGE GIBSON: Please.

7 MR. FRANTZ: I think what the Intervenors
8 are essentially proposing is that we treat 54(hh)(2)
9 as a design-related rule. The Commission has
10 explicitly stated at 783 Federal Register 19445 that
11 this is not a design-related rule. Instead, it's an
12 operational program rule.

13 If the Board keeps that in mind, I think
14 the meaning and purpose of the rule becomes much
15 clearer. If it's treated as an operational program
16 and not as a design.

17 In a design rule, what you do as the
18 Intervenors postulate is you have an initiating event,
19 you calculate the damage and then you have to have
20 measures in place to be able to protect safety given
21 that damage. That's not what this rule is. This is
22 an operational rule. It basically requires us to have
23 operational provisions using the existing design that
24 would be readily available to help mitigate the event.

25 In this regard, it's very similar, I

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1 think, to say emergency planning procedures.
2 Emergency planning procedures aren't developed for
3 specific events or specific accidents. They're
4 developed for accidents in general or events in
5 general.

6 Similarly, these mitigative strategies are
7 developed for fires and explosions in general, not in
8 any specific fire or explosion. And so we can account
9 for aircraft impacts. We can account for any number
10 of different types of fires or explosions. We aren't
11 required to actually evaluate or calculate what the
12 damage state would be from any particular initiating
13 event, because this is not a design rule. It's an
14 operational program rule.

15 JUDGE GIBSON: Okay, let's stick with the
16 design issue because that was one of the questions
17 that we couldn't complete today in open session.

18 And I think you said in order to answer my
19 question you would have to address 06-12?

20 MR. EYE: That is correct, Your Honor.

21 JUDGE GIBSON: Please do with respect to
22 this question of whether you're asking them to do
23 something that is in the nature of a design or whether
24 you're asking them to do something that is in the
25 nature of what is required by (hh) (2)?

1 MR. EYE: The design argument is a red
2 herring. This is not a design question. This is
3 whether the mitigating measures that they have offered
4 will be effective. There is a requirement in the
5 Statement of Considerations that the Applicant develop
6 effective mitigation measures, which only makes sense.
7 Are you going to develop ineffective mitigative
8 measures? Of course, not. That wouldn't be
9 acceptable under any circumstance or in any context.
10 There's an implicit inherent requirement that the
11 mitigative measures be effective.

12 The problem that we've got here is that
13 the Applicant will not tell us what its mitigative
14 measures will do and what the mitigative measures will
15 not do. And to put this in context of NEI 06-12, the
16 disclaimer that we have cited talks about a spectrum
17 of damage states. And I think that's a good
18 conceptual way to think about this.

19 And we would agree that the mitigative
20 measures that have been offered up by the Applicant
21 would land somewhere on the spectrum of damaged states
22 in terms of being effective, but there is no way to
23 know where it gets -- where it would be on the
24 spectrum of damaged states for purposes of
25 effectiveness. We don't know whether it would be

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1 effective at the 10 percent level of damaged states or
2 50 or 60 or 80 or whatever. We simply don't know.

3 And the problem is partly that the
4 Applicant has resisted taking a look at what large
5 loss of plant really means in a quantitative or
6 qualitative sense. And in fact, there was such a
7 resistance to that, that we were -- we resorted to, if
8 you will, going into 07-13, the guidance document for
9 50.150 which does make an attempt to at least
10 qualitatively describe the damaged states that would
11 result from the postulated impact of a large
12 commercial aircraft into a nuclear plant.

13 So what we -- the point in doing that was
14 to establish that the -- that it is, in fact, possible
15 to determine damaged states in nuclear plants
16 subsequent to a large fire, an explosion. NEI 06-13
17 does that. Does it describe the full spectrum of
18 damaged states? That -- I think what we've said in
19 our pleadings is we don't know that it does one way or
20 the other, but what it did do was something that the
21 Applicant has not done and that is try to determine
22 whether its mitigative measures will, in fact, be
23 effective in a large loss of plant area due to fires
24 and explosions.

25 So there's this unknown aspect of the

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1 mitigative measures as to what they would be effective
2 in actually doing. How effective would the mitigation
3 measures be in a particular scenario?

4 JUDGE GIBSON: Well, it seems to me that
5 your use of 07-13 to try to prove what they should
6 have done in their Mitigative Strategies Report is
7 odd, at least, because 07-13 involves design, does it
8 not?

9 MR. EYE: It does --

10 JUDGE GIBSON: We are talking about --
11 here, we are not talking about design here. In fact,
12 I think you all agreed earlier, you weren't seeking
13 them to do design. It was a distinction I thought we
14 agreed on. So I can't understand what -- why you
15 would use 07-13 to try to prove your point of what
16 should have been in this Mitigative Strategies Report?

17 MR. EYE: It's because the Applicant has
18 steadfastly taken the position that it's not possible
19 to describe damaged states. And therefore, they're
20 relieved of that responsibility or that duty. When in
21 fact, 07-13, as a part -- and I'm not suggesting that
22 we're trying to loop in a design issue here. I'm
23 simply extracting the part of 07-13 that does do a
24 qualitative description of damaged states, so it's to
25 establish that it is not an impossible task to do.

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1 And in fact, you have to remember that 51.150 and
2 50.54(hh)(2) are supposed to be complementary
3 rulemakings. And this is highlighted in various ways
4 that I think are noteworthy, not the least of which is
5 that in terms of the qualitative description of
6 damaged states that 07-13 engages in, but then if we
7 want to talk about contention 1 in its omission kind
8 of genesis, which it has, we cite to a particular
9 section of 07-13 which actually says, which actually
10 calls out specific things that it anticipates will be
11 covered in the context of 50.54(hh)(2).

12 JUDGE GIBSON: Hold that thought. I want
13 to get to that, but that is a separate point I want to
14 talk about in a minute.

15 It seems to me though that what the
16 Applicant is saying is it's not a matter of efficacy.
17 They have addressed efficacy to the extent that they
18 needed to. What you're seeking is a far more refined
19 level of specification in what they're saying and I
20 think they're saying no, that comes later when we put
21 fuel in the reactor. We don't do that at the
22 application stage.

23 MR. EYE: They have not addressed
24 efficacy. They have said that these measures would be
25 effective or they've implied that they would be

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1 effective. I don't know that they've ever actually
2 said that they would be effective, but the implication
3 is that when they made the submittal that else would
4 be effective.

5 But they don't ever attempt to make any
6 kind of determination as to whether they would be
7 effective in any particular aspect of the damage
8 spectrum. there's none. They never describe a single
9 part of the damaged stage, spectrum rather, to which
10 these particular mitigative measures would be
11 effective.

12 JUDGE GIBSON: Mr. Frantz?

13 MR. FRANTZ: Effectiveness can be judged
14 in many ways.

15 Mr. Eye has postulated a need to look at
16 a full spectrum of damaged states to determine what is
17 effective.

18 I don't think the rule requires that.
19 There's other ways of judging effectiveness and the
20 way NEI 06-12 specifies is the use of separation and
21 diversity.

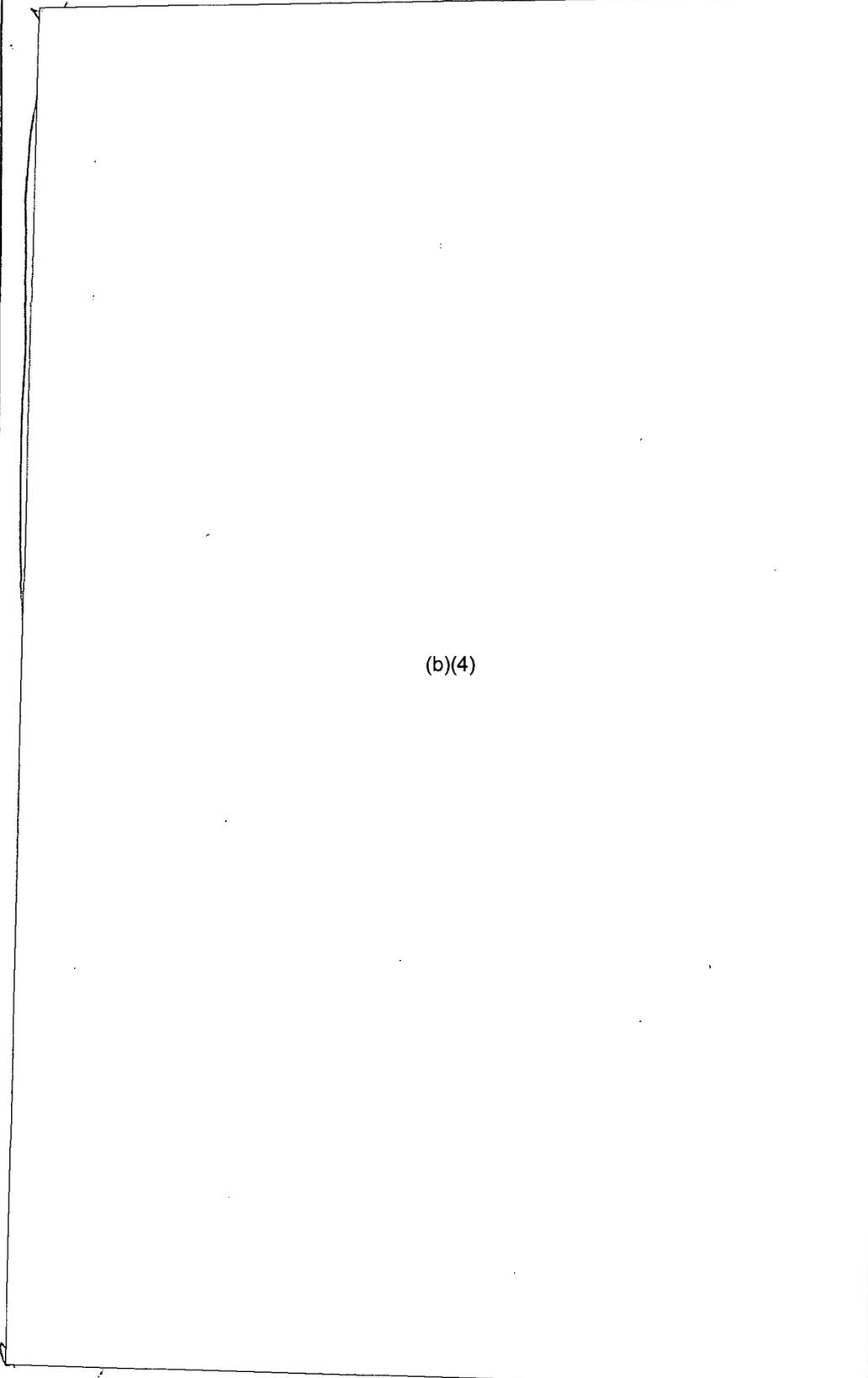
22 Every plant has normal safety-related
23 systems to ensure the safety of the plant. What NEI
24 06-12 says is that there should be also alternate
25 systems out there that are separate and diverse that

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1 can perform some of those same functions.

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Exemption 4 South Texas

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And that type of flexibility gives us effective mitigation measures.

JUDGE CHARBENEAU: I want to ask some questions to help understand damaged states. And I'm not sure who to ask.

Let me start, I guess, with staff. And say if we postulate an event. Let's pick the aircraft crash. Can we assess the damage state of that?

MS. BIELECKI: Well, I think our pleadings indicate there are a number of studies that both the NRC staff and the industry has done over the years since 9/11 to assess a variety of damaged states and the insights and results of these studies were used to formulate the role that we're discussing today. however, because someone can always postulate a different event scenario, once they give you one event scenario, you could always come back and make it bigger or better.

JUDGE CHARBENEAU: I think the answer is yes, you could for an aircraft?

MS. BIELECKI: Yes.

JUDGE CHARBENEAU: Okay, and we might be able to hypothesize the probability of that.

MS. BIELECKI: I suppose.

Exemption 4
South Texas

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1 JUDGE CHARBENEAU: Okay. Another event
2 like the truck explosion. That would probably be
3 something we probably could assess the damage state
4 and the probability for?

5 MS. BIELECKI: Yes.

6 JUDGE CHARBENEAU: And you could envision
7 building up a spectrum of damage states?

8 MS. BIELECKI: Yes.

9 JUDGE CHARBENEAU: By event and a
10 probability. Would such the spectrum be bounded?

11 MS. BIELECKI: I don't think so, because
12 like I said earlier, every time you give me one of
13 them, I can always change the parameters of that event
14 which is why the Commission not to identify specific
15 events, but to focus on a variety of beyond design
16 basis events that would lead to a loss of large areas
17 of the plant.

18 JUDGE CHARBENEAU: The example of the
19 atomic bomb. Another one I thought of was a meteor.

20 MS. BIELECKI: Right.

21 JUDGE CHARBENEAU: In that sense, once can
22 hypothesize a prediction of a partial spectrum of
23 damaged states and I guess now going over to the
24 Petitioner, how do you talk about efficacy in an
25 unbounded spectrum of damage states?

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1 MR. EYE: As the disclaimer in NEI 06-12
2 suggests, at the -- it infers that at the extreme
3 heart of the damaged state spectrum, exactly where
4 that quantitatively would be is not known and is part
5 of omission of contention and it ought to be known.

6 Whatever mitigative measures that have
7 been adopted would not be effective, that is, whatever
8 mitigative measures that are prescribed in 06-12 would
9 not be effective under the presumed extreme part of
10 the damaged spectrum.

11 So when you get something less than the
12 extreme part of the damaged spectrum, it becomes more
13 likely to be able to determine efficacy of mitigative
14 measures, but as pointed out in the high-level insight
15 that was part of the NEI 06-12, there are certain
16 damaged states for which these mitigative measures
17 will not be effective.

18 Now where that begins and ends, Your
19 Honor, is not clear and it's our contention that there
20 ought to be some delineation that is determined so
21 that the decision makers can determine whether
22 licensing this plant, for example, knowing that there
23 are certain damaged states that cannot be dealt with
24 effectively can be part of the base of information to
25 determination whether the plant should receive an

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1 operating license.

2 JUDGE CHARBENEAU: Is part of what you're
3 asking for is a determination of the upper bound and
4 have that explicitly part of the application?

5 MR. EYE: That is part of it. And there's
6 also what we would like to have done is to have the
7 Applicant determine just where -- just how big --
8 what's the dimension of the large loss that their
9 mitigative measures will effectively address.

10 And then we have an idea as to efficacy of
11 the mitigative measures that they have proposed. And
12 once that's done, then it would be a matter of
13 determining whether it's prudent to issue a license
14 knowing that there's a part of the damaged state or
15 spectrum, rather, that would not be addressed by the
16 mitigative measures.

17 JUDGE CHARBENEAU: You know intuitively
18 there has to be events that could not be mitigated.
19 There are atomic bombs, meteors. Try to think of how
20 the requirements are in the regulations that state
21 that we have to specify that upper bound knowing that
22 there will be exceedances or potential exceedances.

23 That's the intent of this part of the
24 regulation.

25 MR. EYE: Perhaps we could clarify this a

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1 little bit by going back to the Statement of
2 Considerations. Because the Statement of
3 Considerations doesn't say think in terms of a nuclear
4 weapon being detonated close by a nuclear plant.

5 It doesn't say think in terms of a
6 meteorite striking a nuclear plant. It says think in
7 terms of aircraft attacks. And then can you construct
8 mitigative measures that will deal effectively with
9 the aftermath of aircraft attacks so that if we think
10 in those terms then we can begin to perhaps get these
11 problems on a scale that would be manageable.

12 And I mean if the Commission would have
13 wanted the regulated community to think in terms of
14 how to mitigate the detonation of a nuclear weapon in
15 close vicinity of a nuclear plant, I think it would
16 have said so.

17 Instead, it said think in terms of large
18 loss of area caused by or instance -- aircraft
19 impacts.

20 JUDGE CHARBENEAU: My understanding was
21 subpart 1 refers specifically to aircrafts. Subpart
22 2 talks to a variety of large events.

23 MR. EYE: It does, but I think that
24 there's so much language throughout the Statement of
25 Considerations that goes back to the idea of aircraft

1 impacts, but it also says it can be from a variety of
2 events.

3 I agree with you. It is not entirely
4 clear. But if we go to what is clearer in the
5 Statement of Considerations, it is that we think in
6 terms of the magnitude and numbers of fires and
7 explosions as resulting from something that would be
8 akin to the impact of a large commercial airliner or
9 perhaps more than one airline impacting a particular
10 target, for instance.

11 And once we think in those terms, then it
12 becomes more likely to be able to identify a damage
13 spectrum that mitigative measures would be applicable.

14 JUDGE CHARBENEAU: I'm trying to stay on
15 the same topic.

16 When staff looks at the license
17 application to evaluate the Mitigative Strategies
18 Report, what guidance do you use to evaluate
19 acceptability?

20 MS. BIELECKI: As I mentioned earlier, the
21 staff is going to focus on whether or not the
22 Applicant has a flexible approach that's redundant,
23 you know, like Mr. Frantz said you have separation of
24 different features of the plant. That comes from NEI
25 06-12 as well as all the staff studies that have been

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1 conducted sine post 9/11. We initially issued the
2 security order of the B5B order in 2002.

3 There are a number of studies done by both
4 the staff and the industry. Additional safeguards
5 level guidance was issued in 2005 in NEI 06-12
6 revision 2 was endorsed by the staff in 2006.
7 This is for operating plants.

8 JUDGE CHARBENEAU: A little more
9 specifically. I've got something in the Standard
10 Review Plan for 13.6.5 which I think is physical
11 assessment. Is that the document that the staff --

12 MS. BIELECKI: No.

13 JUDGE CHARBENEAU: Can you -- is it
14 possible to tell me what this document is for?

15 MS. BIELECKI: Can I have a minute,
16 please?

17 (Pause..)

18 MS. BIELECKI: Staff has informed me that
19 this document, he believes, relates to the regular
20 security requirements, not to the 50.54(hh)(2)
21 mitigative strategies requirements.

22 JUDGE GIBSON: Which document relates to
23 those?

24 MS. BIELECKI: Can you --

25 JUDGE GIBSON: Would you say? You just

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1 said when a document refers to some rules and one
2 applies to something else. I want to make sure we
3 have that clear.

4 MS. BIELECKI: The Standard Review Plan
5 Section 13.6.5 is what Judge Charbeneau was referring
6 to and our staff member who reviews the mitigative
7 strategies plan informs me that this will not be used
8 in the review of the 50.41(hh)(2) mitigative
9 strategies.

10 JUDGE GIBSON: It would instead be used to
11 review what?

12 MS. BIELECKI: I --

13 MR. FRANTZ: I know that document --

14 JUDGE GIBSON: Please, Mr. Frantz -- just
15 help us out here.

16 MR. FRANTZ: SOC 13.6.5 I believe is a
17 draft document. It was never finalized. The approved
18 guidance document is NEI 06-12 and the Commission] has
19 approved that. It's being used, both by the staff and
20 by the Applicants to develop their mitigating
21 strategies report.

22 JUDGE CHARBENEAU: So they're actually
23 taking 06-12 as the basis for the review as well?

24 MR. FRANTZ: And plus the staff is
25 developing, has issued, for example on ISG 16 in draft

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1 form, is using that in conjunction with NEI 06-12.

2 JUDGE ARNOLD: I have a question for Mr.
3 Eye. A little while back, you mentioned that the
4 Statement of Considerations has in it somewhere that
5 the statement that the mitigative strategy should be
6 effective. Could you give me exactly where that is?

7 MR. EYE: It's in several places, Your
8 Honor. One is at page 13958 on the -- it would be in
9 the first column. There's a reference to
10 effectiveness. It says Section 50.54(hh)(2) focuses
11 on ensuring that nuclear power plant licensees will be
12 able to implement effective mitigative measures for
13 large fires and explosions, including but not
14 explicitly limited to those caused by the impacts of
15 large, commercial aircraft.

16 The effective reference is elsewhere, but
17 that's one example. And I think that we've cited the
18 effective language in our papers as well. I can find
19 those, if you would like, but that's one example.

20 JUDGE ARNOLD: In the Statement of
21 Considerations, this is a question for the staff, page
22 13957, the Commission decided that the more
23 performance-based language in 50.54(hh)(2) was a
24 better approach to account for future reactor facility
25 design.

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1 I look at that 50.54(hh)(2) and if I
2 didn't have them telling me that it was performance-
3 based language, I would not know that. What is
4 performance-based language and how does that affect
5 how it's viewed by the staff in considering the
6 application?

7 MS. BIELECKI: I think in this case
8 performance-based language, when the Commission is
9 describing this rule they look at the mitigative
10 strategies like they do operating programs, whereas an
11 applicant will submit their plans and their guidelines
12 for procedures before the COL is issued and the
13 detailed implementation will not come until after the
14 COL is issued at which point the staff will inspect
15 the implementation to ensure that it was done
16 properly. But at this point it's the guidance and the
17 programmatic procedures that they will use later.

18 JUDGE ARNOLD: I'll accept that. I do
19 have a few more questions. The requirements of
20 (hh)(2) applies to currently licensed plants as well
21 as COL applicants. Is that correct?

22 MS. BIELECKI: Correct.

23 JUDGE ARNOLD: Have these plants complied
24 with (hh)(2)?

25 MS. BIELECKI: Yes, on the same page that

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1 you were just quoting from, the middle column at the
2 bottom, it says that "current reactor licensees have
3 already developed and implemented procedures that
4 comply with 50.54(hh)(2) requirements and do not
5 require additional actions to comply."

6 I would note that operating plants have
7 not identified the full spectrum of damaged states as
8 suggested by the Intervenors. And I would just like
9 to add one thing to your performance-based question.
10 The staff said, they -- when they were looking at
11 performance base, the Commission is not going to tell
12 you exactly what you need to do. They're going to
13 give you guidelines and then they can decide how
14 they're going to implement their mitigative
15 strategies.

16 JUDGE ARNOLD: Okay. Well, you've
17 answered my next question, so I think I'm done for the
18 moment.

19 JUDGE GIBSON: Mr. Eye, if we could go to
20 page seven of your petition. You state that
21 "Intervenors understand that the Applicant should not
22 limit its analysis to a single aircraft attack, but
23 instead should address the impacts of multiple
24 aircraft attacks in close, temporal proximity with a
25 coordinated ground attack."

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1 Now the support you provide for that is at
2 least in part is footnote three and in there, you're
3 quoting from the Statement of Considerations and it
4 says "an aircraft impact." It doesn't say multiple
5 aircraft.

6 Is there anything in 50.54(hh)(2) or in
7 the Statement of Considerations that would impose any
8 obligation on the Applicant to study multiple aircraft
9 crashes, even if they were obligated, as you suggest
10 they would be to study a large aircraft impact?

11 MR. EYE: There are two ways to look at
12 that. One is that that I think the Commission
13 anticipates that development of mitigative measures to
14 determine just how large a loss of plant area we're
15 dealing with may not necessarily be restrictive to a
16 particular mode of attack, that it could be -- it
17 could include multiple attack points by multiple
18 adversaries.

19 And the second reason that this becomes
20 more pertinent is and we cite it in footnote one of
21 our response because it's our understanding of the
22 Applicant is already modeling impacts of multiple
23 aircrafts on STP 1 and 2. So it's more than just our
24 assertion that it ought to be done. Evidently, from
25 a modeling and anticipatory standpoint, the Applicant

1 is in the process of running exercises or conducting
2 exercises that assume more than one aircraft impacting
3 at a particular plant.

4 In fact, it's my understanding that they
5 start off with the idea that there are three or four
6 aircraft heading for a particular plant, but only a
7 couple actually get there. So it's -- this is more in
8 the nature of looking at way to determine how large an
9 area of a plant might, in fact, be lost and whether
10 it's multiple airplanes or multiple truck bombs or
11 whatever the initiating event might be, the problem
12 that the term "large loss of plant area" presents,
13 everybody sitting in this room and really the public
14 generally is what is meant by large? Because one can,
15 if one wants to take an expansion view of large, it
16 actually has the effect of negating the separation and
17 diversity aspects of the flexible response that have
18 been suggested as being kind of the underpinnings of
19 the mitigative measures that are offered up.

20 Another example, a large enough loss of
21 plant area would include loss of the capacity through
22 electric pumps to move water to where one wants it,
23 but it would also include the loss of a diesel, if you
24 want to talk about a large loss of plant area. As I
25 understand the plant area, when I think about it, I

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1 think about the site drawing that is in the
 2 environmental report as the plant area. Some might
 3 say well, the plant area is just whatever is inside
 4 the cement walls, but plant to me means what is on
 5 that site drawing which would include,

6 [Redacted]
 7 (b)(4)
 8 [Redacted]

*EXEMPTION 4 NIEI
 & SOUTH TEXAS*

9 So the problem --

10 JUDGE GIBSON: This was a point you made
 11 later and we'll get to that in a second, but I just
 12 want to focus on this one question.

13 Mr. Frantz, would you care to respond?

14 MR. EYE: There was one other aspect of
 15 this, Your Honor, that the Statement of Considerations
 16 actually talks about impacts of large commercial
 17 aircraft. And this is at 13958 in the first column
 18 about a fourth of the way down. It says that
 19 effective mitigative measures for large fires and
 20 explosions caused by the impacts of large, commercial
 21 aircraft. So I don't know that it's necessarily per
 22 se limited to a single aircraft.

23 JUDGE GIBSON: Okay. Mr. Frantz?

24 MR. FRANTZ: He's basically postulating
 25 that several square miles will be wiped out from

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1 whatever means, maybe an atomic bomb, maybe the mid-
2 air that you postulated. He's postulating absurd
3 scenarios, something that the Commission obviously has
4 never required any Applicant to look at and frankly is
5 not possible to mitigate under any scenario.

6 And so what he's postulating is flatly
7 ridiculous.

8 MR. EYE: I'm going to move to strike the
9 flatly ridiculous part because it's not flatly
10 ridiculous. We're dealing here with how to define
11 large.

12 JUDGE GIBSON: Mr. Eye, he did not
13 interrupt you. If you want to respond, I may allow
14 you to do that. But I would please appreciate it if
15 you would let him talk and not interrupt him.

16 MR. EYE: I apologize.

17 JUDGE GIBSON: Thank you.

18 MR. FRANTZ: Second of all, he's talking
19 about the potential for multiple aircraft impacts. At
20 some point where do you stop? Does it stop at two,
21 three, four? Again, what he's requesting is simply
22 not in the rule.

23 And I'd like to go back to Judge
24 Charbeneau's earlier comments, because I thought they
25 were very insightful. Essentially what the

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1 Intervénors are asking the Board to do is set new
2 regulatory policy, to modify what's in the rule or to
3 add to the rule to specify what's not there. There's
4 nothing in the rule, for example, that would require
5 an Applicant to identify the bounding set of events.
6 You won't find that in the language of the rule. You
7 won't find that in the Statement of Considerations.
8 You won't find that in the NRC-approved guidance for
9 the rule.

10 He's basically specifying what he believes
11 policy should be and rather than what the rule
12 actually requires. And so I think this is why we go
13 back to our basic fundamental objection to these
14 contentions is that they are essentially challenging
15 the adequacy of the rule as currently written and
16 therefore the contentions should be rejected under
17 2.335 and they're also not material under 2.309(f)(4).

18 Finally, I might add that if the
19 Commission wanted us to consider particular aircraft
20 impacts, they know how to do that. In fact, they've
21 done that in 50.150. And they have not done that as
22 part of 50.54(hh)(2). They've not specified any
23 particular scenarios. Instead, they just want
24 mitigation measures operational programs to be in
25 place to mitigate a variety of large fires and

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1 explosions.

2 JUDGE GIBSON: Thank you. Now Mr. Eye, is
3 there something you need to say? I've got some more
4 questions I want to ask in response to what Mr. Frantz
5 just said?

6 MR. EYE: I don't think it's ridiculous or
7 absurd to try to determine what large means. That's
8 what we're here to do. What does large mean in the
9 context of aircraft attacks or other initiating
10 events? The Applicant has made no attempt whatsoever
11 to describe what large means.

12 JUDGE GIBSON: We will get to that point
13 in a minute. I would like to turn to page 8 of your
14 petition and you refer there to the NEI extensive
15 damage mitigation guidelines. And where you say they
16 mention broad spatial impacts in combination of
17 failures.

18 Are there any statements in the NEI
19 extensive damage mitigation guidelines that explicitly
20 obligate the Applicant to study multiple aircraft,
21 airline crashes?

22 MR. EYE: No. It says consider. I don't
23 think that it specifies what the initiating events
24 would be, Your Honor. So the answer to your question
25 is no, it does not. But then again it doesn't say

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1 what initiating events it ought to consider either.

2 JUDGE GIBSON: So we are left to ponder
3 whether that level of specificity is encompassed
4 within that rule or not? I appreciate what you're
5 saying. I just want to make sure I understand what
6 your argument is and the basis for it.

7 On page four of your reply, you suggest
8 that 10 CFR 5054 is inextricably intertwined with
9 50.150 and on page 14 of your reply you quote from the
10 October 2007 Federal Register to suggest that there is
11 a nexus between them. Is that correct?

12 MR. EYE: Yes, sir.

13 JUDGE GIBSON: Now the Applicant, I think,
14 made an interesting argument I would like you to
15 address on pages 15 and 16 of its answer. The
16 Applicant is suggesting that a 2007 U.S. Supreme Court
17 decision, National Association of Home Builders, which
18 is cited in footnote 56, requires that we interpret
19 50.54(hh) in such a way that it does not incorporate
20 all of 50.150 because to do that would render it
21 superfluous in contravention of this National
22 Association of Home Builders case.

23 Now all you say in your reply on page 11
24 is that it's possible to read it so that it's not
25 totally superfluous, but I was unable to discern how

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1 you were suggesting that that would not be the
2 practical result. And so can you educate us on what
3 your basis for that statement is?

4 MR. EYE: I'll do my best. We see that
5 the 50.150 goes to structure and function of a nuclear
6 plant in terms of how it can best handle the impact of
7 a -- for example, a large, commercial airliner from a
8 structural and functional standpoint. In other words,
9 what barriers can be erected and other defensive means
10 by which perhaps the impact can be anticipated and
11 still allow with a minimum of human intervention
12 maintain core cooling, spent fuel cooling and
13 containment integrity.

14 So 50.150 is really a structure and
15 function kind of analysis. It's separate from what
16 happens when the impact actually occurs and you get
17 explosions and fires that result. Then the
18 requirements under 50.54(hh)(2) apply. So it's --
19 although they're complementary because they both
20 recognize that we've got a threat environment, that
21 you have to take account of, and so the Commission
22 said let's approach this in two different ways. Let's
23 approach it first, can we design nuclear plants in
24 ways that will, with a minimum of human intervention,
25 allow the objectives of containment integrity, spent

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1 fuel -- may I have a moment, Your Honor?

2 JUDGE GIBSON: Okay, a moment.

3 MR. EYE: Thank you.

4 (Pause.)

5 MR. EYE: My terminology has been
6 corrected. It's with reduced operator intervention
7 maintain the containment integrity, core cooling and
8 spent-fuel pool cooling. So it's part of the
9 structure and function. That's the functional part.
10 The structural part, I think is self evident. Can you
11 build structures that will effectively allow the
12 impact, for example, into a nuclear plant, a large
13 commercial aircraft and still have it maintain the
14 cooling functions that we've been talking about? That
15 is one task. That means that nuclear plant designers
16 get an assignment handed to them that says design a
17 plant that can handle the impact without a lot of
18 operator intervention and still maintain the three
19 objectives.

20 On the other hand, 50.54(hh)(2)
21 requirements really assume that that design doesn't
22 work. It assumes that you've got to intervene in a
23 way with fire suppression or other mitigative measures
24 that will do what the design couldn't accomplish.

25 After the damage has been done, then try

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1 to mitigate that which is necessary to maintain core
2 cooling, containment integrity, spent fuel pool
3 cooling. So the two, while complementary, because
4 they have the same objective, how do you protect the
5 public from radiological releases, have different
6 means by which to do that. And they have
7 complementary and common objectives, but they go about
8 it in different ways. So I don't see that 50.150 is
9 in any way rendered superfluous by a robust
10 50.54(hh)(2) set of mitigative measures that will
11 address the way we see it, the full spectrum of
12 damaged states that could reasonably be expected to
13 occur from, for example, the impacts of large,
14 commercial aircraft.

15 No, let's assume for the moment that
16 50.150 design measures are effective. Great, because
17 then the (hh)(2) requirements really never become
18 operational, but again, if 50.150 design measures turn
19 out not to be effective to allow with a minimum of
20 operator intervention to maintain the three objectives
21 or to achieve the three objectives, then 50.54(hh)(2)
22 mitigative measures become operational or become
23 applicable at that point.

24 So requiring the Applicant to have an
25 effective mitigation strategy does not mean that it's

1 interfering at all with the design responsibilities
2 that it has under 50.150 to try to design a plant that
3 will essentially resist the impacts of the airliner or
4 if it does impact, how it can function still with a
5 minimum of operator intervention to maintain the three
6 primary objectives.

7 JUDGE GIBSON: Mr. Eye, I'm going to --
8 before I let Mr. Frantz respond, I want to know, do we
9 need to stop here? Because you've got a conference
10 with the magistrate?

11 MR. EYE: This is probably as good a time
12 as any.

13 JUDGE GIBSON: I suspect Mr. Frantz might
14 want to respond first, but --

15 MR. FRANTZ: I don't want to interfere
16 with your call. I have no problem if we break now and
17 come back.

18 JUDGE GIBSON: You want to go ahead and
19 take this up after our lunch break?

20 MR. FRANTZ: That would be fine with me.

21 JUDGE GIBSON: Okay, I think that would
22 make more sense. I don't want to feel like Mr. Frantz
23 is getting squeezed here.

24 Let's go with -- it is now 12. Can we say
25 1:15? Will that work for everybody?

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1 MR. EYE: Thank you, Your Honor.

2 JUDGE GIBSON: We will reconvene at 1:15.

3 We'll be in recess until then.

4 (Whereupon, at 12 noon, the hearing was
5 recessed, to reconvene at 1:15 p.m.)

6 JUDGE GIBSON: Please be seated.

7 Just out of an abundance of caution, I
8 take it that everyone in the courtroom is either a
9 party or an employee of a party, or has signed a
10 nondisclosure? Thank you.

11 When we recessed, Mr. Frantz, I believe
12 that there was a pending question.

13 MR. FRANTZ: Yes.

14 JUDGE GIBSON: And Mr. Eye had had an
15 opportunity to address it and you were going to
16 attempt to see if you could address the matters that
17 he addressed.

18 MR. FRANTZ: Yes.

19 JUDGE GIBSON: Please.

20 MR. FRANTZ: I'd like to first address the
21 statement that there is a requirement to assume that
22 the design features needed for the Aircraft Impact
23 Rule would fail when performing evaluations under
24 50.54(hh)(2). That is just inconsistent with the
25 Statement of Considerations for 50.54(hh)(2). And in

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1 particular, at 74 Federal Register 13957 there's a
2 statement to the effect that in giving the mitigative
3 strategies you should account for the design changes
4 and the design features to mitigate aircraft impacts.
5 So now only don't you need to assume failure, you're
6 supposed to actually account for the beneficial
7 effects of those design changes and design features.

8 I might also add that if you interpret the
9 Rule 50.54(hh)(2) as advocated by the Intervenors, I
10 think you essentially would obviate the need for the
11 Aircraft Impact Rule. Not only is he postulating the
12 need to look at one aircraft impact, he's postulating
13 the need to look at multiple aircraft impacts, which
14 is far beyond what the Aircraft Impact Rule itself
15 requires.

16 I think the only reasonable way to
17 interpret these two rules is to interpret 50.150 as a
18 design made up rule and to interpret 50.54(hh)(2) as
19 an operational program rule, and that way I think the
20 rules are complimentary, they are consistent and
21 there's no redundancy.

22 JUDGE GIBSON: Okay. Thank you.

23 Mr. Eye, on page 11 to 13 of your petition
24 I understand you to be saying that NEI 07-13 has been
25 published. It includes a best estimate model of the

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1 resulting damage footprint from the impact of an
2 aircraft and therefore, the Applicant needs to follow
3 NEI 07-13. Is that what you're saying?

4 MR. EYE: No, Your Honor, it is not.

5 JUDGE GIBSON: Well, that's the way it
6 sounded when I read it. So could you please clarify
7 what you're saying?

8 MR. EYE: What we're saying is that
9 there's been an assumption on the part of the
10 Applicant all along that there's really no way to
11 describe damage states that would occur as a
12 consequence of the impact of a large commercial
13 airliner. What we point out is that that has been
14 done in 07-13. There is a qualitative description of
15 various damages states. And the idea that somehow
16 this is an impossible exercise to carry out is belied
17 by the fact that 07-13 goes into a fair amount of
18 detail about various damage states that could be
19 anticipated as a consequence of an impact.

20 So the point that we were trying to make
21 there I think is that there is a means by which at
22 least 07-13 has gone through this exercise to
23 determine what the damage states would be as a result
24 of the impacts of commercial airlines. And so that
25 it's not a task that's beyond their capacity to,

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1 perform; others have done this.

2 Moreover, I presume, although this is
3 classified information that the NRC talks about in --

4 MR. SPENCER: Your Honor --

5 MR. EYE: It's in the *Federal Register*.

6 JUDGE GIBSON: Just hold on. Just a
7 second, Mr. Eye.

8 What is the concern?

9 MR. SPENCER: The concern is that he said
10 this is classified information and then was about to
11 speak.

12 JUDGE GIBSON: Okay. Okay. Let me just
13 make sure you're not going to divulge some classified
14 information, correct, Mr. Eye?

15 MR. EYE: That's correct. I don't have any
16 classified information to divulge.

17 JUDGE GIBSON: You misspoke.

18 MR. EYE: I was interrupted.

19 JUDGE GIBSON: You intended to say
20 something else, correct?

21 MR. EYE: Correct. I was interrupted
22 because --

23 JUDGE GIBSON: Why don't you tell us what
24 you meant to say instead of this being "classified
25 information."

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1 MR. EYE: Thank you.

2 There is a reference to classified
3 information in the rulemaking for 50.150. That
4 reference to classified information talks about the
5 NRC's own analyses that have been done about the
6 consequences of large commercial airliners impacting
7 into nuclear power plants. That classified
8 information, again I am inferring based upon what's in
9 the *Federal Register* note on 50.150, it implies that
10 there are damage states that are described in that as
11 well that would inform those who are trying to
12 determine how to mitigate those effects.

13 So the idea somehow that this is beyond
14 the capacity to perform I think is certainly
15 contradicted by at least those two sources, and I
16 presume that there are others as well that have
17 performed similar kinds of analyses. So that was one
18 point that we were trying to make.

19 The second point is that there is an
20 expectation in these complimentary rulemakings that
21 functionally one will do some things and the other
22 will do other things. And I think it was interesting
23 to me in reading the text of NEI 07-13 that it
24 actually called out some very specific kinds of things
25 that it anticipated would be covered by the (hh)

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1 mitigation strategies. And I quote those on page 11
2 in the single space indent quote where it says that
3 50.54(hh) would cover things called hot shorts,
4 spurious actuations, actual fire spread, shock effects
5 and estimated physical damage footprint. Now those
6 they say would overly complicated the assessments in
7 50.150. And so what they say "and are best addressed
8 through 1054.50.54(hh)(2)." And yet you can go back
9 through the mitigative strategies that have been
10 offered by the Applicant and you cannot find anyplace
11 in their submittal where those particularly parameters
12 are discussed, or even mentioned.

13 So, to the extent that again we get back
14 to a contention of omission, those are omissions that
15 have been assessed in a separate rulemaking, but still
16 it's very specific in terms of what it anticipates is
17 going to happen in the context of the (hh) process.

18 And actual fire spread, they anticipate
19 that in the (hh) context there will be a discussion of
20 how fire spreads through the plant. And, again,
21 that's not done at all.

22 Now is that necessarily the last word on
23 what ought to be done in these mitigated strategies?
24 Not necessarily. Because, frankly, I'm not even sure
25 that that talks about the full spectrum of damage

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1 states, but those are functions, those are issues that
2 are raised in the 50.150 context that they say we're
3 not going to cover these in our rulemaking because
4 those are going to be covered under (hh). In the
5 Applicant's submittal, they are not.

6 JUDGE GIBSON: Mr. Frantz?

7 MR. FRANTZ: Yes. To address his first
8 point regarding the ability to calculate damage states
9 from the aircraft impact, we've never disputed that
10 that's possible. And what we have said is that it's
11 not really possible or feasible to postulate all the
12 multiple types of fires and explosions that could
13 conceivably occur in a calculated damage states based
14 upon numerable numbers of fires and explosions.
15 That's the point raise in NEI 06-12, and that's the
16 point we've raised. We've never disputed the ability
17 to calculate a damage state from a specific designed
18 event.

19 Second of all with respect to his
20 quotation from NEI 07-13, first of all that is not a
21 guidance document designed to implement 50.54(hh)(2).
22 That's a guidance for the Aircraft Impact Rule. But
23 any case --

24 JUDGE GIBSON: I realize it is not. But
25 I would like you to address this point because --

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1 MR. FRANTZ: Absolutely. In fact, I was
2 just --

3 JUDGE GIBSON: -- it is important to
4 understand what -- because it came after 06-12.

5 MR. FRANTZ: Absolutely. I was just in-
6 fact planning to do that.

7 If you look at the quotation. First of
8 all, it doesn't address hot shorts. It says "account
9 for the uncertainties of hot shorts and fire spread."
10 It's talking about uncertainties and not the
11 underlying issue.

12 And I would suggest that, in fact, these
13 issues are addressed even though they are not
14 specifically discussed. As we've been discussing all
15 along today, the way that 06-12 deals with mitigated
16 strategies is by having a flexible response strategy.

17 (b)(4)
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24 Similarly with respect to fire spreads, we
25 assume that there is loss of large area at a plant due

Exemption 4 South Texas

1 to fires. So we do account for fire spread.

2 We don't need to explicitly address these
3 topics to have those uncertainties accounted for in
4 our flexible response strategy.

5 JUDGE GIBSON: Okay. You know, hot shorts
6 sounds like something that a Southwest Airline flight
7 attendant could wear when they living in Dallas. What
8 exactly is a shot short?

9 MR. FRANTZ: It's a short circuit in a
10 cable, for example, that would disable that cable and
11 make it inoperable.

12 JUDGE GIBSON: Okay. Thank you. It
13 conjures up a different image.

14 MR. EYE: Your Honor, may I just comment
15 on the answer that Mr. Frantz gave, if that's
16 permissible?

17 JUDGE GIBSON: Sure. No, no, it's fine.
18 We need to have a complete understanding of this
19 issue, Mr. Eye.

20 MR. EYE: He made two statements that I
21 think would beg a bit of support.

22 One is that there has been a calculation
23 damage states that has been done by the Applicant. If
24 that is the case, it's not been put in their
25 submittal, or anywhere else.

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1 The second is that they do assume a loss
2 of a large area of the plant due to fire. How large
3 is that assumption, or what is the assumption in terms
4 of the dimensions of the loss?

5 And again if that calculation has been
6 done or if that assumption has been built into the
7 submittal, it ought to be called out, it seems, so
8 that we can judge the effectiveness of the mitigation
9 measures in question.

10 JUDGE GIBSON: All right. I'm going to let
11 Mr. Frantz address those points in just a second. But
12 I want to make sure you said later in your petition,
13 I believe, that the Applicant had not addressed
14 appropriately its operations. And is that the same
15 concern that you're raising here: That the
16 description of the potential area that is effected by
17 a fire explosion is not sufficiently large, that their
18 operations are not described as to what would be
19 effected? Is that what you're saying?

20 MR. EYE: No. May I have a moment to
21 consult?

22 JUDGE GIBSON: Sure. No problem.

23 MR. EYE: There is no particular
24 specification at all in the context of 50.54(hh)(2)
25 submittal as to the dimensions of the large area that

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1 they are assuming. There is a data point in the
2 50.150 aircraft assessment design that is called out.
3 But it's not integrated into the 50.54(hh)(2). So it
4 doesn't really have to do with operations. It's more
5 the assumptions that are built into the mitigative
6 measures and whether those assumptions are reasonable
7 in terms of whether the large area that they are
8 defining is in fact large.

9 JUDGE GIBSON: All right.

10 MR. EYE: We just don't know.

11 And I'll contrast this with what they
12 started out with, their fire model in their original
13 environment report, which was called the FIVE Fire
14 Model. I forget what the acronym stands for, but it's
15 F-I-V-E.

16 And it assumed very small fires that were
17 of a room size basically. So we assumed that they've
18 abandoned that and they've scaled it up to some larger
19 area, but that's still an unspecified dimension. And
20 I assume it's larger than the one room, but how much
21 larger?

22 JUDGE GIBSON: Well, let's go to page 5 of
23 your reply. Near the bottom of that page this is what
24 it says: "But it is unknown what the scale of
25 operations is assumed and therefore impossible to

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1 determine whether the mitigative measures are
2 adequate."

3 MR. EYE: I'm sorry, what page were you
4 on, sir?

5 JUDGE GIBSON: Page 5 of your reply.

6 MR. EYE: All right.

7 JUDGE GIBSON: Near the bottom. It says:

8 "But it is unknown what the scale of operations is
9 assumed and therefore impossible to determine whether

10 the mitigative measures are adequate."

11 MR. EYE: I misunderstood your question,
12 and that was probably a poor choice of verbiage on my
13 part. You know, the plug is still the same. We don't
14 know based upon what they've submitted whether the
15 mitigative measures that they're offering up actually
16 address a larger area.

17 JUDGE GIBSON: Okay.

18 MR. EYE: Don't know.

19 JUDGE GIBSON: Okay. That's fine. I
20 wanted to be sure that that's what you were talking
21 about in your reply and I didn't know if it was a
22 separate point. Now that we know it's the same, Mr.
23 Frantz.

24 MR. FRANTZ: Yes. First of all, South
25 Texas has submitted a proposed amendment to the design

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1 certification for the AWR that addresses the Aircraft
 2 Impact Rule. So contrary to Mr. Eye's statement, we
 3 have addressed this for the aircraft impact.

4 Second of all, with respect to his
 5 statements that we haven't defined what he calls "the
 6 large area" or what he also calls "the damaged state"
 7 or "damaged footprint," as we've been saying all along
 8 there's nothing in the rule that requires us to
 9 specify that or to calculate that. That's more of a
 10 design calculation, instead we're dealing with
 11 operational programs and mitigative strategies under
 12 those operational programs where we are just required
 13 to use a diverse and separate systems. By having this
 14 diversity and separation we assure that we can account
 15 for loss of large areas of the plant. We don't
 16 actually have to define what that entails.

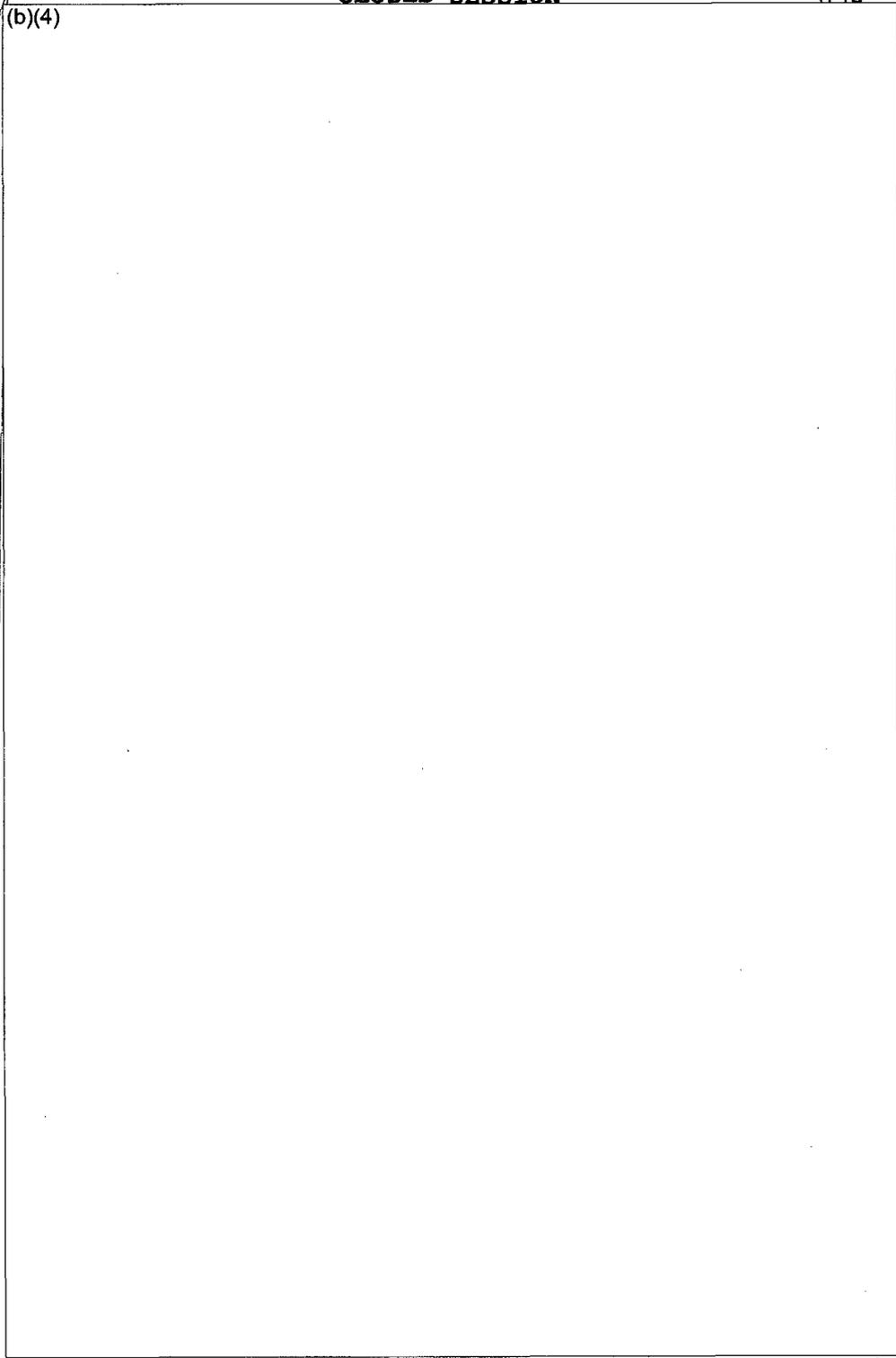
17 Now by definition because we're dealing
 18 with alternate systems or capabilities, we assume we
 19 lose the safety-related capabilities that are inherent
 20 in the plant.

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 22 (b)(4)
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Exempted from 4 South TC-1015

(b)(4)

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Exemption 4 South Texas

This gives us a flexibility to deal
 basically with a loss of all of that area dealing with
 the spent fuel pool. And that's just typical of our

1 flexible response strategy.

2 MR. EYE: May I? Thank you.

3 JUDGE GIBSON: You may, Mr. Eye.

4 MR. EYE: Thank you.

5 The effectiveness of the adequate
6 separation really depends on how large the area that's
7 affected. I mean, it's a common sense kind of
8 approach here.

9 The effectiveness of the adequate --
10 whether the separation is adequate, the distance in
11 separation is adequate depends on how large the loss
12 of the plant is. They're assuming that the loss of
13 the plant area is small enough that it would only take
14 out one of their means by which to supply makeup
15 water, for example. Or they assume that they lose
16 both and they have a portable means by which to do it.
17 The problem with that is, again, it's sort of a common
18 sense approach.

19 If they've lost all capability to move
20 water onto, for example, the makeup water in the spent
21 fuel pool

[Redacted area]

(b)(4)

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24 So from just a common sense
25 kind of perspective here, the ability to make up water

EXEMPTED BY SOUTH TEXAS

1 in the spent fuel pool and reactor containment is
 2 important, and we recognize that they are at least
 3 attempting to anticipate how to do that, but once
 4 that's done now you got fires to deal with. And the
 5 means by which to do that have been compromised or
 6 destroyed.

7 So it's not necessarily the spacial
 8 separation that gets you to a point where you can say
 9 you've got effective mitigation measures. Because
 10 that really does depend upon the dimensions of the
 11 loss.

12 MR. FRANTZ: If I may very quickly?

13 JUDGE GIBSON: Yes, you may, Mr. Frantz.

14 (b)(4)

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I think more importantly, though, what
 he's doing is shifting the burden. It's his burden to
 come forward and identify what is wrong with our
 mitigative strategies and have some support for that.
 He's not done that.

24 (b)(4)

*Exemption 4
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EXEMPTION 4
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He hasn't provided any basis for criticizing the adequacy of those measures. And it's an improper burden shifting on his part. It's his burden to come forward with some basis for claiming that our measures are ineffective.

JUDGE GIBSON: Okay. We talked about this question a little earlier, but we couldn't get to it, so I want to come back to it. Is it your position that even if the Applicant complies with NEI 06-12, that's still not sufficient to achieve complete compliance with 10 CFR 50.54(hh)(2)? And then you said but the reasons why you couldn't explain because it would involve NEI 06-12. Would you please do that now?

MR. EYE: Yes, sir.

JUDGE GIBSON: Thank you.

MR. EYE: I'll do my best.

It gets back to the disclaimers in the NEI 06-12 which say very clearly that the mitigative measures will not be effective in all damage states. So if you assume that the Commission anticipates that mitigative measures will be effective, the NEI 06-12 disclaimer clearly says that the mitigative measures that it prescribes will not work under all damage

1 states, will not be effective all damage stated. And
2 there's no escape language in either the regulation
3 itself or the Statement of Considerations that allows
4 the Applicant to arbitrarily decide how much
5 mitigation they'll offer up over a particular
6 dimension of loss.

7 And clearly, the authors of NEI 06-12 saw
8 the realistic possibility that on the damage spectrum
9 things would get bad enough that you could throw all
10 the mitigative measures that are prescribed in NEI 06-
11 12 at the problem and it would not be successful. So
12 then you have an ineffective set of mitigation
13 measures that don't address the full spectrum of
14 damage.

15 There's furthermore, no escape language in
16 the Statement of Considerations or on the face of the
17 regulation itself which says there's no need to
18 consider the full spectrum of damage states.

19 And on the one hand, it's interesting that
20 the Applicant and staff, for that matter, embrace NEI
21 06-12 in terms of prescriptive aspects of it, but then
22 reject in large measure the disclaimers. And to a
23 certain extent, I mean I can certainly understand why.
24 Because the disclaimers tend to undermine the question
25 of effectiveness of the mitigation strategies.

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1 And there is an ISG that is still in the
2 process of being developed that they may further
3 inform the parties and the panel -- the ISG would
4 presumably once its released in final would provide
5 some additional guidance in terms of precisely what at
6 least the staff anticipates in required for compliance
7 with 50.54(hh)(2). That ISG is for new reactors. Not
8 for existing, but for new reactors. And the SOC
9 certainly calls out that distinction between new and
10 extant reactors.

11 JUDGE GIBSON: And you're suggesting that
12 to the extent that there are certain things that NEI
13 06-12 does not address for purposes of compliance with
14 50.54(hh)(2), but that when this ISG is complete
15 you're assuming that it will address the remainder of
16 those issues? I realize you don't have a crystal ball
17 and you can't read their mind, but that's your working
18 assumption, I take?

19 MR. EYE: I'm not assuming anything about
20 it, Your Honor. In fact, I think that there's a
21 footnote somewhere in one of our papers that says we
22 reserve the right to contest the ISG as well. Because
23 if the ISG, for example, doesn't address the full
24 spectrum of damage states, then we've still got a
25 problem with demonstrating effectiveness of mitigation

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1 strategies.

2 JUDGE GIBSON: Okay. Mr. Frantz?

3 MR. FRANTZ: Yes. It's curious that he
4 says that NEI 06-12 is not sufficient to satisfy the
5 rule when the Commission itself has stated explicitly
6 that it is sufficient to satisfy the rule. He's
7 basically challenging the Commission's determination
8 here. And, of course, we're all bound by what the
9 Commission has said.

10 He also said that there's nothing in the
11 Statement of Considerations that would indicate an
12 intent to limit the evaluation to less than the full
13 spectrum of damage states. Well, I think there is.
14 As I quoted earlier this morning at 74 Federal
15 Register 13928 and 13957 the Commission explicitly
16 stated that the mitigated measures only need to cover
17 readily available resources and practical measures.
18 We don't need to go beyond those. And to the extent
19 that we can't mitigate events such as an atomic bomb
20 going off, so be it. There's no requirement that we
21 do so in the rule.

22 JUDGE GIBSON: Okay.

23 MS. BIELECKI: Your Honor, can I make one
24 clarifying point?

25 JUDGE GIBSON: Surely.

1 MS. BIELECKI: Mr. Eye said that the
2 Commission has accepted only portions of NEI 06-12.
3 And I'd just like to again, as Mr. Frantz pointed out,
4 point to the Board to the *Federal Register* notice on
5 page 13858 for the final rule where the Commission
6 endorsed NEI 06-12 as an acceptable method for current
7 reactors along with lessons learned that was issued in
8 guidance to reactors in 2005.

9 MR. EYE: May I address that point, Your
10 Honor?

11 JUDGE GIBSON: Yes, you can, Mr. Eye.

12 MR. EYE: Thank you.

13 The only reason I said it is because it
14 was for current reactors. And that's the distinction
15 that I think needs to be drawn there.

16 JUDGE GIBSON: Okay. Judge Arnold?

17 JUDGE ARNOLD: I have a question for the
18 staff. And I may be asking you to be a little bit
19 clairvoyant here. But if the Commission endorsed NEI
20 06-12, they would be aware in there of the statement
21 that the mitigative actions would not be successful
22 for range of damage states, right?

23 MS. BIELECKI: Yes, Your Honor.

24 JUDGE ARNOLD: Now would they have
25 endorsed it if they objected to that statement?

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1 MS. BIELECKI: No, Judge Arnold. Excuse
2 me. I think that's a very good point.

3 I think we pointed out earlier a statement
4 from the SOCs that indicated you can't postulate the
5 full spectrum of damage states because as Judge
6 Charbeneau was indicating earlier, once you come up
7 with one of them you could always change that a little
8 bit and come up another event. So I think the
9 Commission was fully aware of these statements in NEI
10 06-12 as reflected in the Statements of Consideration.

11 I think it's also pertinent to point out
12 again that current reactors have complied with
13 50.54(hh)(2). The Commission said that what they have
14 done is sufficient and those reactors have not
15 specified a full spectrum of damage states.

16 JUDGE ARNOLD: It sounds like you want to
17 reply to that.

18 MR. EYE: Well, if you wouldn't mind,
19 thank you.

20 JUDGE ARNOLD: Sure.

21 MR. EYE: There's really two things that
22 I think to say about that. There's certainly nothing
23 in the SOC that calls out specifically the disclaimers
24 and says we are taking those into account and
25 nevertheless endorsing the prescriptive measures by

1 which current licensees can comply. So that doesn't
2 necessarily say anything about whether new applicants
3 or applicants get the benefit of this same NEI 06-12
4 that current licensees have.

5 The second piece of this is, is as a
6 matter of law you are not bound by an endorsed NEI 06-
7 12. You're not bound. As a matter of case law in the
8 NRC you don't have to follow that if in your judgment
9 as an independent panel you believe that there are
10 deficiencies in the guidance document or there are
11 things in the guidance document that you want to
12 differ with or take note of, however you want to do
13 it. You are an independent body. You are not bound
14 by the designation of that document as having some
15 sort of inherent authority because its not a
16 regulation.

17 NEI 06-12 hasn't gone through the
18 rulemaking adoption process. It's not a regulation.
19 It is not a rule of law. It is a guidance document.
20 And under the citations that we provided in our papers
21 there is a line of precedent in NRC case law that says
22 that may be rejected by hearing panels.

23 So, again, the imprimatur of perfection
24 that is being laid upon NEI 06-12, the prescription
25 measures, is I think overblown and I think that it's

1 important also to note the language that the
2 Commission used in the Statement of Consideration it
3 said that this is a way to comply with 50.54(hh)(2).
4 What I think, and I think it's speculation, frankly,
5 for any assumption we made about what the Commission
6 did and didn't do as far as adopting that particular
7 document as guidance, but if you want to read into it,
8 it's just as easy to say that what they were endorsing
9 were the prescriptive measures for current reactors.
10 And that's as far as it was going to go.

11 So there's no reason to assume for any
12 purpose that this going to be the last word in terms
13 of applicants for reactors have to comply with. The
14 ISG that's in the process of being developed,
15 presumably, will also draw on operating experience
16 that will presumably inform the decisions about how to
17 comply 50.54(hh)(2).

18 There was another point I was going to
19 make, and it escapes me at the moment. So I'll stop.

20 JUDGE GIBSON: I want to follow up on what
21 Mr. Eye just said, Mr. Frantz and staff both. It is
22 certainly improper in this proceeding to attack the
23 statute, the regulations that we are addressing. On
24 the other hand, what is the level of deference or I
25 should say what is the level of impermissibility that

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1 we are to accord to something in the Statement of
2 Considerations? Do you have any cases where we are
3 basically prohibited from addressing something if the
4 Commission has addressed it in the Statement of
5 Considerations?

6 MR. FRANTZ: There is not an absolute
7 prohibition. The Statement of Consideration is used
8 to interpret the rule. It's not a rule itself. It's
9 not binding, per se. But it does certainly indicate
10 the intent of the Commission. It indicates what the
11 Commission had in mind when it passed the rule. It
12 certainly supports our interpretation of the rule,
13 that our interpretation is not unreasonable.

14 I might also add that just in terms of NRC
15 guidance documents, they're entitled to special weight
16 in proceedings. There have to be a fair amount of
17 contrary evidence before you'd want to discard NRC
18 guidance in general, let alone something that's been
19 endorsed by the Commission.

20 And so typically what happens is and
21 there's an assumption that if you comply with guidance
22 documents or complying with the rule, it doesn't mean
23 you're required to comply with guidance documents.
24 You can always propose an alternative. And as long as
25 you've justified the alternative, that's acceptable,

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1 too.

2 But typically if you do comply with the
3 guidance documents, if you comply with the Statement
4 of Considerations, that's presumptively a compliance
5 with the rule itself and there has to be very, very
6 strong evidence to the contrary. And we just haven't
7 heard it from Mr. Eye.

8 JUDGE GIBSON: Thank you.

9 Staff?

10 MS. BIELECKI: I think I would echo those
11 sentiments. As Mr. Eye said, the SOCs do not provide
12 regulatory requirements but they do indicate the
13 Commission's intent for this rule, especially
14 considering the fact that they endorse NEI 06-12
15 contemporaneously with the issuance of this final
16 rule. So I think that provides useful guidance for
17 the Applicant, Intervenors and the Board in
18 interpreting what the Commission meant by these
19 regulations.

20 JUDGE GIBSON: Okay.

21 MS. BIELECKI: Thank you, Your Honor.

22 JUDGE GIBSON: Thank you.

23 Okay. I believe we'll start with Mr. Eye,
24 because I don't think either Mr. Eye nor Mr. Frantz
25 was able to give a complete answer to this question

1 during our open session.

2 There is a distinction that you seek
3 during your reply on page 9 between types of fires and
4 explosions and nature and extent of the damage that
5 the fires and explosions cause. And you were trying
6 to explain what the scope of that was. I believe Mr.
7 Frantz was trying to describe the scope of how he saw
8 that. What he said was that he agreed with me it was
9 distinction without a difference. I didn't
10 characterize it that way, but I submit that was plea.
11 And he said yes. But he wasn't able to explain why.

12 So would you please elaborate on your
13 remarks and then we'll let Mr. Frantz do so.

14 MR. EYE: Sure. I think part of this,
15 again, goes back to the disclaimers or the high level
16 insights, which I'll use the descriptions used in NEI
17 06-12 for the bullet points in the introduction. That
18 are characterized as high level insights. I'd call
19 them disclaimers, but that's just a difference in a
20 label, I suppose.

21 Irrespective of the type of fire that is
22 involved. A type of fire to me means what is its
23 cause and origin, if you will to use the language of
24 firefighters and arson investigators and arson
25 litigators. Cause and origin of fires talks about

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1 what caused it. In this case we would say one of the
2 causes could be an aircraft impact. And the origin of
3 it, where did it occur.

4 That goes to the type of fire that we're
5 dealing with. That's not particularly relevant in
6 terms of determining whether the magnitude and the
7 numbers of fires and explosions that have to be dealt
8 with are adequately addressed in the mitigative
9 measures. And this has its origins in the Statement
10 of Considerations where there was a comment made that
11 said that 50.54(hh)(2) should take into consideration
12 the types of fires that could cause the loss of large
13 areas of the plant. Well, and I think that properly
14 so in the context of thinking about mitigative
15 measures the Commission basically said no, the types
16 of fires could be a lot of things. It could be
17 aircraft impacts, it could be other things.

18 What we're interested in is how you deal
19 with large areas of the plant that have been lost to
20 fires and explosions. And that's the origin of that.

21 And the reason I didn't feel free about
22 talking about it during the public session was because
23 it does go back to this question that's raised in the
24 high level insights in NEI 06-12 about the damage
25 state spectrum and that part of it being so severe

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1 that the mitigative measures won't be adequate. Well
2 that indicates that there is a loss of a large area of
3 the plant, so large and so severe that mitigative
4 measures that are prescribed in NEI 06-12 aren't going
5 to work.

6 Now some would say that well that's really
7 postulating something that's just absurd. That's
8 ridiculous. You can't assume that there's going to be
9 the detonation of a nuclear device near the plant and
10 expect us to mitigate that. And to certain extent, I
11 think that that's a reasonable kind of statement. But
12 what does the regulation itself and the Statement of
13 Considerations go to? And what was the origin of all
14 this?

15 The origin of all this wasn't the
16 denotation of a nuclear weapon. It wasn't a meteorite
17 coming in and hitting One World Trade and Two World
18 Trade and the Pentagon. Those were jet aircraft that
19 did that. And that's what originated this whole
20 discussion.

21 If you take a look at the *Federal Register*
22 notice that announced 50.54(hh)(2) at the very
23 beginning it says: "This occasioned by the realities
24 that we now live in in an enhanced threat environment
25 as a result of the attacks on September 11, 2001."

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1 So it stands to reason in sort of a common
2 sense way that irrespective of whether we're talking
3 about an Oklahoma City type fertilizer truck bomb
4 that's parked out near the plant and causes a large
5 loss of area or whether it's a jet aircraft, or
6 whether it's some other cause, perhaps a natural
7 disaster causes fires, explosions that cause a large
8 loss of plant area. The types of fires, the cause and
9 origin of it, is really secondary to the effects of
10 it. And the mitigation strategies are intended to
11 address the effects, not the types, the effects of
12 whatever the initiating event may be, or events.

13 JUDGE GIBSON: Okay. Mr. Frantz?

14 MR. FRANTZ: I guess I'm just totally
15 confused as to what the Intervenors are now arguing
16 because in their contentions they argue that we need
17 to postulate, for example, an aircraft impact and
18 calculate the resulting damage states. And they
19 mentioned other causes; a truck bomb and we need to
20 calculate the damage states from that. And now
21 they've just said well no, we don't need to calculate,
22 or identify, or postulate a cause at all. We just
23 need to assume loss of large areas of the plant. Now
24 that's our position, by the way.

25 We agree with that. We don't have to

1 postulate a cause. We don't have calculate damage
2 states. And if they're now agreeing with that
3 position, I think we can dispose of all these
4 contentions readily.

5 They're talking out of both sides of their
6 mouths. Either we need to postulate a cause and
7 calculate damage states or we don't. But it's
8 impossible to calculate damage states and damage
9 footprints unless you have a cause to begin with. And
10 so they can't have it both ways.

11 If they're asking us to calculate damage
12 states, that is what was considered and rejected by
13 the Commission when they issued the rule. And that's
14 very explicit in the quotation that you mentioned
15 earlier this morning.

16 So I think the Intervenors need to clarify
17 where they're coming from because they can't have it
18 both ways.

19 JUDGE GIBSON: The language in the
20 Statement of Considerations to which Mr. Frantz
21 referred, and then I will let you respond, Mr. Eye.
22 And you can only talk out of your one side of your
23 mouth this time, okay?

24 Let's go with this: The NRC does not
25 believe it is necessary or even practical that the

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1 prescription that Applicants be required to evaluate
 2 specific types of fires and explosions and specific
 3 damage states be added to the final rule, right?
 4 That's what it says. Okay.

5 Now I think that's the language you were
 6 referring to?

7 MR. FRANTZ: That's correct.

8 JUDGE GIBSON: Okay.

9 MR. EYE: How large an area of a plant do
 10 they assume they can mitigate the loss on?

11 JUDGE GIBSON: And that's your point,
 12 right?

13 MR. EYE: That is my point. They from a
 14 common sense perspective, they have refused to tell us
 15 what their definition of "large" is its applied to the
 16 mitigative measure.

17 JUDGE GIBSON: Okay. And whether he's
 18 right or not about that, I think that part has been
 19 very clear today. He is arguing that.

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Exemption 4 South Texas

1 JUDGE GIBSON: Yes. Okay. I think we
 2 know where each other stands, but you know I don't
 3 think there's been a lack of consistency on that
 4 point. I think we do understand what he's saying.

5 MR. FRANTZ: And all I'm saying is that
 6 what he's saying is not consistent with what the
 7 Commission determined when it issued the rule.

8 JUDGE GIBSON: We hear that.

9 MR. FRANTZ: Okay.

10 JUDGE GIBSON: We hear that.

11 Judge Arnold?

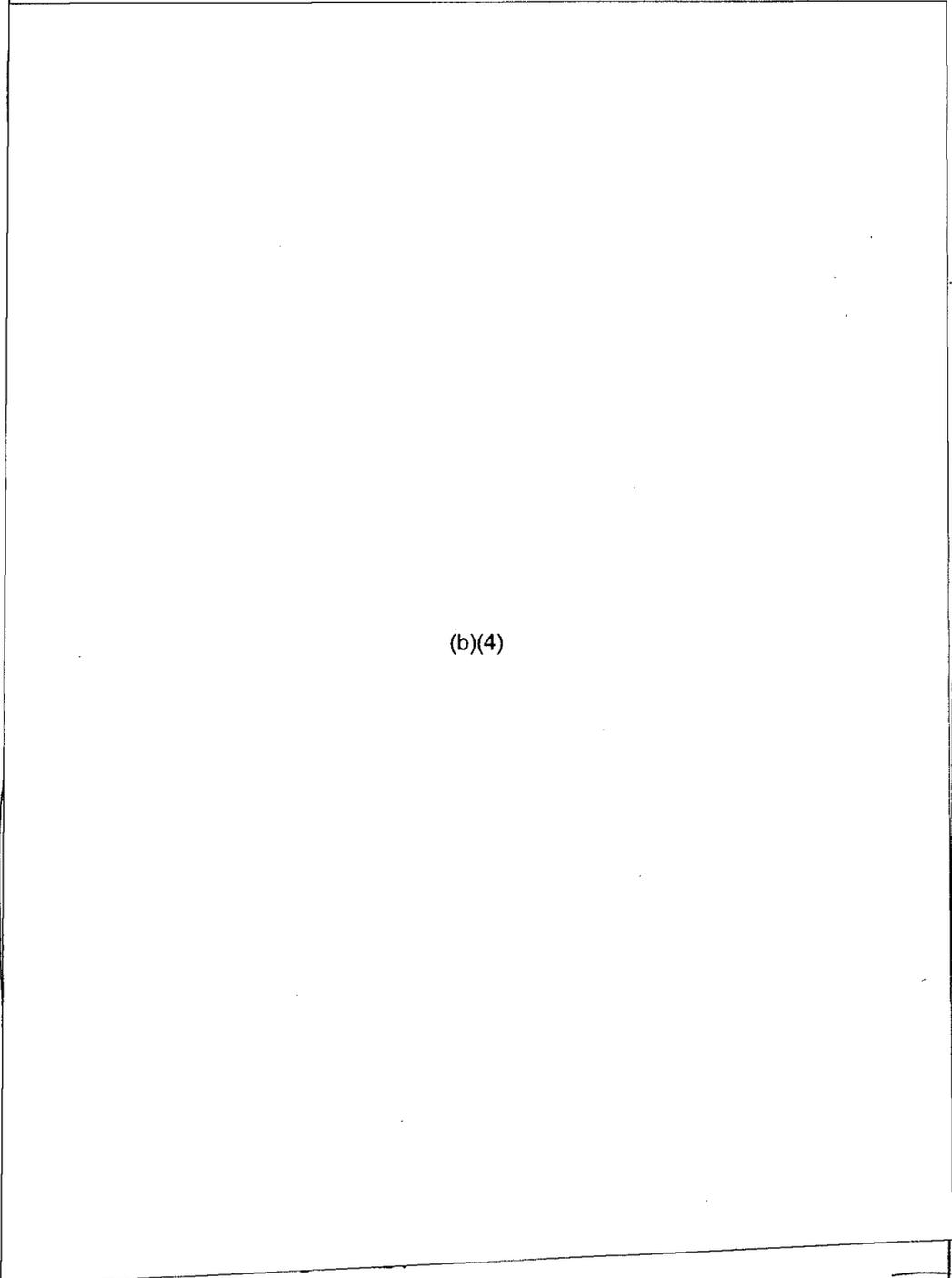
12 JUDGE ARNOLD: Yes. I have just, I think,
 13 a simple question.

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EXEMPTION 4 NIEI & SOUTH TEXAS

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EXEMPTION 4 SOUTH TEXAS

JUDGE GIBSON: Okay. Now I take it your characterization, though, is that that's not a large enough area?

MR. EYE: I still haven't heard a

1 quantification of the area that's involved in their
2 mitigative measures. It's sure not spelled out in
3 their submittal.

4 JUDGE GIBSON: Okay. Well, I think he
5 just described it.

6 MR. EYE: No. He described the distance
7 outside the target area. He didn't describe the are--

8 JUDGE GIBSON: But he described what the
9 target area was, right?

10 MR. EYE: Is the target area the same as
11 the large area that they assumed that they will be
12 able to mitigate?

13 MR. FRANTZ: I'm sorry. I didn't hear the
14 question.

15 MR. EYE: Is the target area --

16 JUDGE GIBSON: I want to make sure we're
17 not talking about past each other. I want to say to
18 the extent that we can get some kind of closure to
19 what is it you're saying that they're not covering and
20 what is it you're saying you are covering, and how
21 close are we to talking about the same area? And what
22 are we talking about? Are we talking about applies
23 and oranges?

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1 MR. FRANTZ: I don't know that it's stated
2 as an equation like that. But I think it is fair to
3 say that it's the area which encompasses the safety-
4 related systems.

5 JUDGE GIBSON: Okay.

6 MR. EYE: And what are the dimensions of
7 that?

8 MR. FRANTZ: I don't have the diagrams
9 here with me.

10 JUDGE GIBSON: Are the diagrams in the
11 mitigative strategies report?

12 MR. FRANTZ: No. They're in the FSAR, in
13 the design control document for the ABWR.

14 JUDGE GIBSON: Do you have those?

15 MR. EYE: Yes. Which diagrams? Are we
16 talking about the site layout drawing?

17 JUDGE GIBSON: Again, I want to see if we
18 can try to get some closure on this because we're just
19 talking past each other. What is the specific area
20 we're talking about and is that -- that area might be
21 right. It might not be. But let's try to find it out
22 what it is.

23 MR. FRANTZ: Yes. There is no requirement
24 in the rule or the Statement of Considerations, or the
25 NEI guidance document that requires us to identify a

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1 specific square feet.

2 JUDGE GIBSON: Okay.

3 MR. FRANTZ: WE're doing this
4 qualitatively. For example, with the spent fuel pool
5 you're assuming you're losing everything in the area
6 of the spent fuel pool.

7 JUDGE GIBSON: Okay.

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Exemption 4 South Texas

18 JUDGE GIBSON: Okay. So he's described
19 qualitatively the safety systems as being the effected
20 area. And are you saying it needs to be a larger
21 area? Are you saying it needs to be defined as a
22 specific, you know square meters? I'm just trying to
23 understand. I wanted to see if I could understand
24 what it is you're asking and what it is they're not
25 saying so that we can try to figure out if we can ever

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1 reach closure. So we can even understand what you
2 guys -- you guys are just talking past each other.
3 Okay.

4 He's saying this is what we got to do.
5 You're saying this is what you got to do. And there's
6 no way to -- you know -- like trying to meld Jello to
7 a tree.

8 MR. EYE: May I consult for a moment, sir?

9 JUDGE GIBSON: Yes.

10 MR. EYE: Thank you.

11 JUDGE GIBSON: Yes.

12 MR. EYE: The Applicant has really
13 designated just now sort of an arbitrary area that
14 they consider to be large. Now whether they have done
15 a designation that is based upon some sort of careful
16 quantification of a loss of large area that, as I
17 understand it, would be the equivalent of the entire
18 plant. I mean if the target area is considered to be
19 the heart of the plant and they lose all of that plus
20 some area beyond it,

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23 So this really their own sort of post hoc
24 way of matching up their mitigative strategies with
25 now something that they are arbitrarily designating as

EXEMPTION 4
SOUTH TEXAS

1 a large area. And there was no attempt whatsoever to
2 do that in the mitigative strategies itself.

3 JUDGE GIBSON: Okay. That's fine.

4 I'll bet you that Mr. Frantz will say that
5 he wasn't being arbitrary, but qualitative.

6 MR. FRANTZ: Yes.

7 JUDGE GIBSON: But go ahead, Mr. Frantz.

8 MR. FRANTZ: Yes. Thank you.

9 In that regard, we were following the NEI
10 06-12 guidance and the Commission specifies what we
11 need to assume is lost in terms of the systems and
12 then specify alternatives which are outside the target
13 area. And we did that. And it was not at all
14 arbitrary. There's simply nothing in the rule or the
15 Statement of Considerations that would require us to
16 do what Mr. Eye is suggesting that we do, that we have
17 these calculations. He wants qualification. There's
18 nothing that requires such qualification.

19 That's what you do for a design related
20 rule, not for an operational programmatic rule.

21 JUDGE GIBSON: Okay.

22 MR. EYE: Now they are defining what they
23 consider to be large or really attempting to do that
24 without ever matching their strategies to it. That's
25 our point.

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1 JUDGE GIBSON: Okay. Thank you.

2 I think we're a little closer to
3 understanding your two respective positions better.
4 And I appreciate that.

5 Judge Charbeneau?

6 JUDGE CHARBENEAU: I've got a question I
7 think for staff. And it refers to the rule itself as
8 the wording in the rule.

9 And if you look at 50.54(hh)(2) there's a
10 phrase that says: "You will implement guidance and
11 strategies intended to maintain the coolant." And the
12 word I'd like to focus on is the word "intended" in
13 there. And looking at in two ways.

14 First off, what is the implication and
15 meaning of the word "intended"? And if the word
16 "intended" is removed as though it had not been
17 included, what would be the meaning of the regulation
18 under those conditions?

19 MS. BIELECKI: Well, Judge Charbeneau, I
20 think the fact that "intended" in this regulation is
21 important. It speaks to the fact that the Commission
22 when it was drafting this rule and looking back at the
23 history of post 9/11 and all the studies that helped
24 informed this rule and the guidance that has been
25 provided since, it indicates that a 100 percent

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1 success is not what the Commission is looking for.
2 The Commission is looking for programs and strategies
3 that are intended to do the three things that the rule
4 calls out: Restore core cooling, containment and
5 spent fuel pool cooling capabilities. And as we said
6 before, success is determined by the staff based on
7 flexibility, diversity, redundancy. It's not
8 depending on your situation or mitigating strategies,
9 success may mean having enough time to evacuate a
10 number of people out of the area, and it may mean
11 something else for a different strategy.

12 So it depends on what you're looking at.
13 I think "intended" is important. And if it wasn't
14 there, if the Commission said "Shall do these things
15 that will be effective," I think that has a very
16 different meaning and the SOCs would reflect that if
17 that's what the Commission had in fact intended.

18 JUDGE CHARBENEAU: Same question to the
19 Applicant?

20 MR. FRANTZ: Yes, I think in general
21 that's correct. I think that you have to look at that
22 word, though, in the context of not just the sentence
23 that appears in the regulation but also the Statement
24 of Considerations and the Commission endorsed
25 guidance. I think when you look at all those together

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1 it indicates a clear intent by the Commission not to
2 require us to be able to mitigate every postulate fire
3 and explosion, but only instead to have readily
4 available mitigation measures and practical measures
5 in place.

6 MR. EYE: Thank you.

7 Well, I think "intended" here is the way
8 the Commission communicated that they have an
9 expectation that the mitigation strategies will be
10 expected to accomplish certain functions and tasks.
11 I mean, I think that you could substitute
12 "expectation" for "intended" if you want, or "expects"
13 and get kind of the same regulatory effect.

14 Intent is not meant to say you can lower
15 the bar and somehow scale back on what you're going to
16 mitigate. It's really there to say here's what the
17 Commission expects to have happen. The Commission
18 expects you to have a means by which to maintain
19 reactor -- to maintain containment integrity, reactor
20 fuel cooling and spent fuel pool cooling.

21 JUDGE CHARBENEAU: Could the Commission
22 have achieved what you're suggesting by striking the
23 word "intent"?

24 MR. EYE: They could have, but I don't
25 know that they didn't do the same thing by saying

1 "intended." I mean the word "intent" is a legally
2 loaded word. And intent goes to state of mind.
3 Intend is a state of mind in the law. It's what one
4 intends to have happen.

5 I think that the reason I don't know that
6 it has exactly that same application here is because
7 now we're dealing with something that the expectations
8 of the Commission, this is what they intend to have
9 happen. So I don't know that you necessarily are
10 changing the expectations of the Commission by either
11 using or not using the word intent.

12 JUDGE CHARBENEAU: At least at first
13 glance it would appear you could remove a lot of -- if
14 that was the intent, you could remove a lot of
15 ambiguity by removing the word "intent."

16 MR. EYE: Well, perhaps that's the case.
17 But again, intent in a legal sense, in a criminal law
18 sense, for example, it goes to a person's state of
19 mind during a particular act or omission.

20 Here I think it really goes to what are
21 the expectations. And there are three objectives that
22 they have expectations that there will be achieved
23 through these mitigative measures. So I don't know
24 that necessarily focusing on the word "intended" gets
25 us very far in terms of the substantive question are

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1 the mitigative measures that have been offered up
2 sufficient to do what is expected. That is to
3 maintain -- well, the three regulatory objectives.

4 JUDGE GIBSON: Okay. Mr. Frantz, I'd like
5 to turn to page 16 of your answer footnote 55, which
6 I think was intended as a clarifying footnote. And it
7 got me more confused after I read it.

8 If I understand correctly, NEI 07-13
9 provides that certainties should be addressed through
10 10 CFR 50.54(hh)(2). And then you seem to suggest
11 that these uncertainties don't need to be addressed in
12 10 CFR 50.54(hh)(2) because NEI 06-12 does not
13 explicitly require their evaluation.

14 Now I assume that NEI 07-13 came later in
15 time.

16 MR. FRANTZ: Yes.

17 JUDGE GIBSON: So I am difficulty
18 understanding why these uncertainties don't need to be
19 addressed.

20 MR. FRANTZ: Yes. I think they're
21 inherently accounted for by the flexible mitigation
22 strategies inherent in NEI 06-12. Because of the way
23 we approach mitigation we don't have to postulate a
24 particular damage states.

25 [Redacted]

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EXEMPTION 4
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We don't actually have to describe every uncertainty in order to have adequate mitigative strategies. I think just the approach itself would inherently account for this. And that's all I was trying to say here.

JUDGE GIBSON: Okay. Okay. That helps.

MR. EYE: I think I've addressed that particular aspect of NEI 07-13 in our papers and comments today. Unless there's something more --

JUDGE GIBSON: No. No, there's not.

Does the staff have a view on that point? If you don't, it's okay.

MS. BIELECKI: I would just add that, again, I would echo what Mr. Frantz said. That NEI 06-12 captures the uncertainty and it may be useful for the Board to look at the final rulemaking for the Aircraft Impact Rule on page 74 Federal Register 28112 where the Commission discusses that an applicant shall use realistic analyses to identify and incorporate into their design aircraft impact considerations.

So if they're using realistic analyses,

1 there's a number of uncertainties inherent in this,
2 and 50.54(hh) (2) is designed as a compensatory measure
3 to kind of capture the uncertainty. But that doesn't
4 mean you're doing specific analyses and assessments.
5 It's again, you have your diverse flexible approaches
6 that can mitigate any uncertainties.

7 JUDGE GIBSON: Okay.

8 MS. BIELECKI: If that helps.

9 JUDGE GIBSON: Okay. Mr. Frantz has said
10 several times today, talked about water. On page 8 I
11 believe on your reply, you say that the Applicant
12 should develop mitigation strategies to address those
13 conditions that would effectively render the facility
14 incapable of pumping water from either on site sources
15 or obtaining water from off site sources for fire
16 suppression and make-up water, correct? Okay.

17 MR. FRANTZ: I believe that's -- yes.

18 JUDGE GIBSON: Okay. Now from the
19 standpoint of the Applicant regardless of whether that
20 is or is not an accurate characterization do -- well,
21 do you think that is an accurate characterization of
22 your obligations?

23 MR. FRANTZ: No.

24 JUDGE GIBSON: Why not?

25 MR. FRANTZ: What he's postulating is you

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wipe out the plant,

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If you

have nothing left. If you have nothing left, and you can't bring in off site water as she's postulating, then there's no possible way you can possibly mitigate these events. His scenario is not a realistic scenario and it's not something we're required to evaluate under 50.54(hh) (2).

MR. EYE: Does it say then in the Statement of Considerations or on the face of the regulation? In fact, in the Statement of Considerations it says numerous times about how there's an expectation that the mitigation strategies will be effective. And as we say in that particular paragraph that you read from, Your Honor, is it unreasonable for them to assume that they'll have compromised capacities to move water from where it is to where they want it in terms of looking at mitigation strategies?

The Applicant may assert that what we keep talking about here, although I don't think we've actually used the term worst case scenario, is a kind of a variation of that. Because the worst case scenario is what's at one end of the damage spectrum.

EXEMPTION 4
SOUTH TE-105

1 And is there an obligation from a regulatory
 2 standpoint given they have the charge in the Statement
 3 of Considerations to develop effective mitigation
 4 measures.

5 And they'll come back and say well that's
 6 really bounded or that's limited by, or qualified by
 7 the ability to have on site resources readily
 8 available to address the problems. Well, there's
 9 nothing in the regulation that requires or that would
 10 limit it to that.

11 [REDACTED]

12 (b)(4)

13 [REDACTED]

14 [REDACTED]

EXEMPTION 4 SOUTH TEXAS

15 I mean, I don't know what "readily
 16 available" means here. I mean, one would assume if
 17 it's readily available, it can be implemented in a
 18 very short period of time. But even in their own MST
 19 there's some lag time that's anticipated if they need
 20 to bring water in from off site, which again I think
 21 that's realistic. It would take some time to do that.

22 So their own limitation that they are
 23 introducing, that is readily available resources, I
 24 think they even anticipate that resources may be
 25 required that aren't necessarily readily available.

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Well, there's no indication

that those would necessarily be readily available, but they are anticipating that they might need to do that.

So by inference they're even assuming that their capacity to deal with a large loss of plant area due to fire, explosions might be so compromised that they wouldn't be able to do it with the readily available resources that they've got on site. That they might have to reach off site to have this capacity to deal with a mitigation strategy.

So the idea somehow that they should be required in an effective mitigation strategy to have a means by which to, as we say here, not be able to pump water because their resources have been compromised, doesn't seem to me to be anywhere near outside the realm of possibility.

I mean, we all took the tour in the van that morning back in the latter part of June. And we saw how close those pipes were that come out of that main cooling reservoir and come over the embankment and down into the plant.

[Redacted]

(b)(4)

*Exemption 4
South Texas*

*Exemption 4
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1 If those are all lost because it's in the
2 target area, that would certainly create a situation
3 where they've got a compromised ability to move water
4 from where it is to where they want it.

5 JUDGE GIBSON: Okay. Mr. Frantz?

6 MR. FRANTZ: The sentence you quoted says
7 we lose on site water and we lose off site water. And
8 then he's asking us to be able to mitigate an event
9 and we don't have any water supplies. It's just not
10 a realistic scenario and it's not something the
11 Commission has required us to.

12 He keeps saying that we need to point to
13 something in the Statement of Considerations which
14 says we don't need to do this. Well, it's almost
15 impossible to prove a negative, and that's what he's
16 asking us to do in this case.

17 The Commission describe everything we're
18 not required to do in the Statement of Considerations.
19 It only has to specify what we are required to do, not
20 what we're not required to do. And given that, this
21 entire scenario is just totally unrealistic and is
22 well beyond anything that's required by the rule or
23 the Statement of Considerations or NEI 06-12.

24 JUDGE GIBSON: Okay.

25 JUDGE CHARBENEAU: I have no more.

1 JUDGE GIBSON: Believe it or not, I
2 believe that concludes my questions about contention
3 1. Do you have any more, Judge Charbeneau?

4 JUDGE CHARBENEAU: I have no more.

5 JUDGE GIBSON: Okay. Well, believe it or
6 not, I think we're ready to start on number two.

7 Mr. Eye, with respect to contention two
8 you've asserted that the Applicant is incorrect when
9 it claims that it can delay certain assessments and
10 evaluations related to these mitigative measures until
11 a later point in time.

12 The Applicant appears to be claiming on
13 page 20 of its answer that 52.80(d) does not require
14 those studies to be done at this point. And these are
15 things that can be done later.

16 What authority do you have for requiring
17 the Applicant to develop his material in conjunction
18 with the submission of its application?

19 MR. EYE: Your Honor, first, we don't make
20 a blanket statement that all of the activities that
21 are scheduled for future development ought to be
22 considered now in the course of developing mitigating
23 strategies. We do differentiate or attempted to
24 differentiate. And that's why we don't include the
25 entire list of MST actions that are deferred for

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1 future. Some of them are probably reasonably put off
2 for future things.

3 But on the other hand, the more perhaps
4 salient aspect of this contention goes to the question
5 whether these functions, if you will, will be
6 developed considering the full spectrum of damage
7 states that they may have to deal with. So it's
8 really back to this question of the adequacy of the
9 mitigation strategies. In way, irrespective of when
10 they're developed in a temporal sense, it's what they
11 do functionally that's important.

12 Now the reason that we say that some of
13 these ought to be done now is because it just seemed
14 looking through that list of items that they were
15 willing to defer out to the future, some of them
16 functionally seem to have a direct impact on the
17 efficacy of these mitigative strategies under assuming
18 some pretty severe damage states that need to be dealt
19 with. So the question arose are these mitigating
20 strategies that are being deferred to future
21 development being done with the intention to address
22 the full spectrum damage states? And I think that we
23 know the answer to that now after today's hearing.
24 The answer is no, they're not. The Applicant is
25 refusing to develop mitigative strategies to cover the

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1 full spectrum of damage states.

2 So does the full spectrum of damage states
3 mean anything from a regulatory perspective? We think
4 it does because it addresses the effectiveness part.

5 So again, I think this is really kind of
6 a two part contention. It's based on timing and then
7 what is being done in terms of addressing these future
8 events under some part of the damage spectrum, and
9 then define part of the damage spectrum. And we would
10 assert that it needs to be done with a consideration
11 of full spectrum of damage states.

12 JUDGE GIBSON: Okay.

13 MR. FRANTZ: This just seems to be another
14 form of contention one. He's criticizing the
15 statement in NEI 06-12 which says that we don't
16 consider the full spectrum of damage states. Again,
17 the Commission has endorsed NEI 06-12 and there's just
18 no basis for criticizing our application on the
19 grounds that we're implementing that guidance
20 document.

21 JUDGE GIBSON: And you're essentially
22 arguing that 50.54(hh)(1) are things that are going to
23 be done later and that essentially captures most of
24 the issues that he's attempting to address? Is that
25 correct?

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1 MR. FRANTZ: I'm not sure I'd say that the
 2 (hh) (1) procedures are more designed specifically for
 3 aircraft attacks or potential respective aircraft
 4 attacks where many of our procedures that we need to
 5 develop for (hh) (2) deal with fires and explosions in
 6 general and staging of equipment in general. It's
 7 much broader than just aircraft events.

8 JUDGE GIBSON: Yes. Okay.

9 MS. BIELECKI: Your Honor, if I can just
 10 add? The Commission --

11 JUDGE GIBSON: Yes.

12 MS. BIELECKI: -- again in the Statement
 13 of Considerations on page 13933 for this rule stated
 14 that they be mitigative strategies as operational
 15 programs where you submit you know, the description of
 16 the program at this time and then the more detailed
 17 implementation will come later.

18 JUDGE GIBSON: Thank you.

19 JUDGE ARNOLD: Are these items addressed
 20 in NEI 06-12? Let me ask the Applicant.

21 MR. FRANTZ: Yes.
 22 (b)(4)

23 We've just taken that and identified in our way any
 24 column in that table what we're doing to address the
 25 generic expectations in the left hand column.

Exemption 4 NEI

1 JUDGE CHARBENEAU: Does that guidance give
2 you any direct guidance on the timing for these items?

3 MR. FRANTZ: I don't believe it does
4 offhand in general.

5 JUDGE GIBSON: Thank you.

6 Why don't we take a ten minute break and
7 we'll start with contention three after this recess.

8 (Whereupon, at 2:36 p.m. a recess until
9 2:48 p.m.)

10 JUDGE GIBSON: Mr. Eye, with respect to
11 contention number three, what in NEI 06-12 would
12 obligate the Applicant to devise exposure, radiation
13 exposure information at the level of detail that
14 you're suggesting be done here?

15 MR. EYE: I think there is a requirement
16 that there be a dose assessment for on-site responders
17 to do whatever they have to deal with. And part of
18 this contention was really based on a statement that
19 we looked at in the Mitigative Strategies Table South
20 Texas. And as Mr. Frantz said earlier, essentially
21 this MST is lifted off the template that was in NEI

22 06-12. (b)(4)

23 And it talks about evaluating
24 existing dose projection models for their adequacy in
25 projecting doses to event responders on site. And

*Exemption 4
South Texas*

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1 here's the language that caught my eye: "Under the
2 conditions envisioned for this event."

3 And then if you go over to the
4 commitment/strategy side of the table, it talks about
5 projecting doses to event responders on site under the
6 conditions envisioned for this event. And then it
7 says that those will be completed prior to fuel load.

8 JUDGE GIBSON: Right.

9 MR. EYE: This event, what event are we
10 referring to here?

11 JUDGE GIBSON: Okay. I didn't mean to cut
12 you off. I'm sorry. It just precipitated a question.

13 MR. EYE: Well, and --

14 JUDGE GIBSON: Do you need to finish
15 saying something?

16 MR. EYE: Well, I'm trying to get back to
17 your question. And so the level of detail that we
18 think is required is to have some definition to the
19 event that is anticipated that they will do their dose
20 responses for. And then of course, not unexpectedly,
21 I'm sure, we say that the event should be keyed to the
22 full spectrum of damage states. And of course, very
23 consistently, this is one of the places that we part
24 company with the Applicant and staff, because they say
25 the full spectrum damage states is really not a very

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1 important concept here.

2 On the other hand, when the term "this
3 event" is used, we don't know how they describe the
4 event for purposes of calculating doses. And if it's
5 somewhere else in their submittal, I haven't found it
6 in terms of what the event is that they are going to
7 evaluate for purposes of doing dose projections.

8 JUDGE GIBSON: Okay. Before I let Mr.
9 Frantz respond, I want to let you know that listening
10 to you sounds to me like we're talking about two
11 separate questions. One of them has to do with
12 timing. At what point in time is it necessary to
13 complete this work? And my understanding from the
14 Applicant's answer on page 23 is that they plan to
15 postpone their exposure analysis until they load fuel
16 in the reactor.

17 Now the second question is, from what you
18 said, what is the event? Okay? Which we'll let Mr.
19 Frantz address and say it. But I just want to make
20 sure that you were clear, that's the point in time
21 when they believe it is appropriate to do this
22 analysis.

23 Now, are you disputing that and saying
24 that needs to be done now as part of the application?

25 MR. EYE: Yes, and the reason is because,

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1 again the point of this whole exercise is to give
2 decision makers like you and those in the chain of
3 decision making in the NRC adequate information to
4 know what the implications are of licensing these
5 units. It would seem to me that knowing what the
6 doses are for on-site responders for some, here,
7 undefined event would be something that decision
8 makers would want to know before they determine that
9 a license ought to be issued. Because if you permit
10 the Applicant to wait to develop these dose
11 projections until fuel is loaded, they've already got
12 their license, and it's a fait accompli at that point.
13 Irrespective of what their dose assessments may turn
14 out to be, they have their license. And at that time,
15 even if the dose assessments seem shockingly large or
16 disturbingly large to the point where you would think
17 this isn't acceptable, they have their license. And
18 once they've got the license in hand, it's kind of
19 hard to back track and get it, particularly if they've
20 been given the implicit approval to do so by approving
21 the timing of doing these tasks in the process of the
22 COLA adjudication.

23 JUDGE GIBSON: Okay. Now again, I
24 appreciate your concerns that you've expressed here
25 with respect to whether that is a good policy decision

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1 on the part of the Commission to postpone this as the
2 Applicant is proposing that they do. But I guess I
3 need to find out is there something explicit about
4 timing; not about what this event is, which we'll talk
5 about in a second, is there something about timing in
6 06-12 or in 50.54(hh) that would provide you with the
7 legal support for your position and this contention
8 that this be done now?

9 MR. EYE: Well, I referred to it without
10 saying the National Environmental Policy Act, NEPA,
11 which in a way is a framework by which this license
12 will be judged. And what's the point of NEPA? NEPA
13 is to not decide what should or shouldn't be done.
14 NEPA is to develop adequate information so that
15 decision makers can me an informed and reasoned
16 decision.

17 This is a parameter that won't be answered
18 under the proposed timing that the Applicant would
19 have happen. This won't be answered until after the
20 license is in hand and all the decisions have been
21 made. So this has, you know, pretty profound human
22 consequences potentially.

23 JUDGE GIBSON: Okay.

24 MR. EYE: And it's really rooted in NEPA
25 as a means by which to inform decision makers about

1 the implications of their actions.

2 JUDGE GIBSON: Okay. Fair enough.

3 ADMIN. JUDGE ARNOLD: Just one question on
4 that. If the basis is in NEPA, why isn't this in 10
5 C.F.R. 51, instead of 10 C.F.R. 50?

6 MR. EYE: I don't know the answer to that,
7 Your Honor.

8 JUDGE GIBSON: Okay. We'll let staff
9 address this NEPA in a minute, but, Mr. Frantz, I know
10 you're anxious to talk about the event.

11 MR. FRANTZ: Yes.

12 JUDGE GIBSON: And, you know, we would
13 encourage you also to talk about timing.

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(b)(4)

EXEMPTED BY SOUTH TEXAS

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EXEMPTION 4 SOUTH TEXAS

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(b)(4)

Going on, the second issue I'd like to raise, I think we need to distinguish between dose assessment and dose assessment model. Item 3 does not deal with dose assessments. It deals with the model. It's a computer program that's used to calculate dose. The actual dose projection of the dose assessment would not be done unless there's an event, because you'd have to determine what the actual conditions are of that event, including for example, wind speed and direction, which is important in calculating dose. You can't do that until you actually have the event in hand.

And so we won't be doing any dose assessment now, or even before fuel load. We would only be doing the dose assessment at the time of the event itself using the computer programs.

JUDGE GIBSON: At the time of what event itself?

1 MR. FRANTZ: Well, the fire or explosion
2 that gives rise to the water spray scrubbing.

3 JUDGE GIBSON: And that's when you would
4 actually be doing monitoring, if you will --

5 MR. FRANTZ: Yes.

6 JUDGE GIBSON: -- to determine what dose
7 some person or group got?

8 MR. FRANTZ: We'd be doing that, yes,
9 also.

10 JUDGE GIBSON: Prior to that point in
11 time, you're talking about doing modeling of what a
12 likely dose would be in the event of some event?

13 MR. FRANTZ: No, what we have is a
14 program --

15 JUDGE GIBSON: No? In the event of what?

16 MR. FRANTZ: -- that is able to calculate
17 a dose given certain input parameters.

18 JUDGE GIBSON: Okay.

19 MR. FRANTZ: And so at the time of the
20 event we'd actually know what those inputs are. We
21 don't know what they are now. We don't know what the
22 wind speed is right now, for example.

23 JUDGE GIBSON: Right.

24 MR. FRANTZ: And so you'd input that and
25 then calculate the dose at the time of the event. So

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1 all we need to do now is basically commit to
2 evaluating our dose model, make sure we can use it,
3 have that done before a fuel load and then actually do
4 the assessment at the time of the event, if it occurs.

5 JUDGE GIBSON: Let me make sure I
6 understand what you're saying.

7 MR. FRANTZ: Yes.

8 JUDGE GIBSON: You develop the model in
9 conjunction with your application. Is that right?

10 MR. FRANTZ: In this case we have a
11 commitment to develop the model in our application.

12 JUDGE GIBSON: You haven't developed the
13 model?

14 MR. FRANTZ: We do have an existing model
15 for 1 and 2.

16 JUDGE GIBSON: Okay. Fine.

17 MR. FRANTZ: Mostly likely what we'll do
18 is just use that with a few tweaks to reflect
19 differences in the design for 3 and 4.

20 JUDGE GIBSON: So you're not doing a
21 model?

22 MR. FRANTZ: Now. We will before fuel
23 load.

24 JUDGE GIBSON: Right. You're not doing a
25 model for 3 and 4 at this point in time?

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1 MR. FRANTZ: That's right.

2 JUDGE GIBSON: When you do fuel loading,
3 you'll be developing a model. And then in the event
4 of an event, you would then do a dose assessment based
5 on using the model and the input parameters that would
6 exist at that point in time?

7 MR. FRANTZ: That's right.

8 JUDGE GIBSON: Okay.

9 MR. FRANTZ: And rather than develop a
10 model, what we'd use is probably the existing model
11 for 1 and 2 and just change it to reflect 3 and 4.

12 JUDGE GIBSON: Sure. Okay. Now, what do
13 you do now? Since you don't do a model now, what do
14 you do with respect to radiation at this point in
15 time?

16 MR. FRANTZ: We don't do anything besides
17 have a commitment in here to account for doses as part
18 of our mitigative strategies. We can't ignore, for
19 example, that the emergency responders may receive a
20 dose. And so we have provisions in place that we have
21 to use and have to implement in the event the event
22 occurs to account for those doses to ensure that our
23 emergency responders do not receive an excessive dose.

24 JUDGE GIBSON: Okay. And that would have
25 nothing to do with a model. It would have nothing to

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1 do with monitoring. It would have to do with the
2 mitigative strategies that you would put in place in
3 order to ensure that on-site responders would have a
4 minimal or hopefully insignificant, but hopefully not
5 lethal dose of radiation as a result of whatever they
6 were doing in the immediate vicinity of whatever the
7 source was?

8 MR. FRANTZ: That's correct.

9 JUDGE GIBSON: Is that fair statement?

10 MR. FRANTZ: That's fair.

11 JUDGE GIBSON: Okay. Now, NEPA. I'd like
12 to know, Mr. Eye characterized how he felt NEPA fit
13 into this radiation assessment and I want to see if
14 you could explain to me how you see, if at all, NEPA
15 fitting into that?

16 MR. SPENCER: Well, Your Honor, I would
17 just point out that 50.54(hh)(2), 52.80(d), those
18 regulations were issued based on the Atomic Energy
19 Act, not based on NEPA. And NEPA was nowhere
20 mentioned in contention 3, and I'm not sure if Mr. Eye
21 meaning the Interveners, believe that 50.54(hh)(2) is
22 based on NEPA, or if they're trying to add a legal
23 basis at oral argument to their contention. If
24 they're trying to add a legal basis, they should have
25 stated their bases in their contention or else justify

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1 filing late. If they want to amend their contention,
2 they could do and try to justify filing late. But the
3 basis of the rule is not NEPA.

4 JUDGE GIBSON: All right. Your objection
5 to their failure to mention NEPA in their original
6 document is duly noted, but just humor me. I'd like
7 to know, where does NEPA fit into a radiation
8 assessment? Where, if at all, is it addressed in
9 terms of your NEPA study?

10 MR. SPENCER: I'm not exactly sure. We
11 did not bring an environmental expert today because
12 NEPA is not part of their contention. So we did not
13 think that there would be a need to explain NEPA. I
14 know that severe accidents are considered and some
15 basis accidents are considered in the EIS. I can't
16 speak specifically to how radiation doses are
17 assessed.

18 JUDGE GIBSON: Okay.

19 MR. FRANTZ: If I may follow up on that.
20 Section --

21 JUDGE GIBSON: I was just going to ask.
22 I was suspecting that you had a view, Mr. Frantz.

23 MR. FRANTZ: Yes. Section 7.2 of the
24 environmental report does address severe accidents,
25 including radiation doses. In fact, that's the major

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1 impact from a severe accident, is radiation doses, not
2 only, of course, to on-site workers, but also to the
3 off-site public. And we do calculate that and
4 determine the impact in section 7.2 of the
5 environmental report.

6 JUDGE GIBSON: So even though you're not
7 required to prepare a model for anticipating dose to
8 workers and others in the event of a release until
9 after you load fuel in the reactor or close to that
10 point in time, you nevertheless would need to address
11 and will be addressing that in your Environmental
12 Assessment and it will be addressed presumably in the
13 Environmental Impact Statement?

14 MR. FRANTZ: It's addressed at a gross
15 level. It's not addressed at an individual level.
16 And of course, these dose assessments are more for
17 individual radiation protection safety, not the gross
18 kind of analysis that you would do corporately under
19 NEPA in section 7.2.

20 JUDGE GIBSON: But presumably that's
21 already been addressed in the environmental
22 information that you've submitted to the Agency,
23 right?

24 MR. FRANTZ: It's encompassed within that,
25 yes.

1 JUDGE GIBSON: Okay. And so, Mr. Eye, in
2 terms of NEPA, it's actually already been addressed
3 and it wasn't just part of something they did in this
4 amendment?

5 MR. EYE: Well, in terms of NEPA, the
6 environmental impact --

7 JUDGE GIBSON: Let me just clarify
8 that just to make one more point and then you can
9 respond.

10 MR. EYE: Okay.

11 JUDGE GIBSON: If I understand what Mr.
12 Frantz is saying, they've already address radiation
13 exposure in the environmental documents that they've
14 provided to the Agency. In terms of additional
15 radiation assessment that would be done in conjunction
16 with the amendment, there will not be anything else
17 that they're intending to do unless the staff gives
18 them an RAI or something. There's not anything else
19 they're intending to do with respect to radiation
20 assessment for purposes of NEPA. They will however be
21 doing this, preparing this model when we get closer to
22 fuel load.

23 Now, that's what I understand him to be
24 saying. And now you can respond. I just wanted to be
25 sure that we understood what we're hearing from the

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1 Applicant and probably would have heard from the staff
2 if they'd know about these issues.

3 MR. EYE: I understand what Mr. Frantz has
4 said as well. The reference to NEPA is really about
5 a technique of analysis that I think is just as
6 applicable under the Atomic Energy Act, 42 USC 2133,
7 subpart D, that says the public interest needs to be
8 considered, the public's health needs to be considered
9 before a license is issued. And so there's really a
10 parallel between NEPA and how the Atomic Energy Act I
11 think directs the decision making process to be done.
12 I mean, there's nothing unusual about that. That's
13 kind of the technique, or that's how most of these
14 inquiries are conducted. Gather the information,
15 analyze it and try to make the best decision possible.

16 Whether it is a NEPA requirement or a
17 requirement under the AEA at 42 USC 2133(d), the
18 Applicant needs to do this dose project model first to
19 inform the decision makers about the quantitative
20 impacts that they expect would happen from somebody
21 being on a cherry picker leaning over a hole in a
22 spent fuel pool and pouring water on it as radiation
23 comes out. And the reason that that's important is so
24 that they can essentially establish that they've got
25 a credible strategy that doesn't necessarily put

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1 people in harm's way by getting doses of radiation
2 that, as you said, hopefully wouldn't be lethal. But
3 we don't know that. We don't know whether they would
4 be lethal or not because they're not going to do a
5 dose projection model until after they've got a
6 license in hand. Don't know.

7 The specter of a responder climbing up on
8 a cherry picker bucket and being lifted up several
9 stories and leaning over spraying water into a spent
10 fuel pool that's been impacted, let's say, by a large
11 commercial airliner, puts somebody in harm's way. How
12 much harm? Is it a lethal dose? Don't know. And
13 they're not going to do a dose projection model until
14 it's too late for licensing purposes to make any
15 difference.

16 JUDGE GIBSON: I think we understand your
17 position.

18 MR. FRANTZ: Yes, I may have given the
19 misimpression. I don't think we'd actually probably
20 have a worker on top of that cherry picker leaning
21 over a hole, but we would have workers perhaps
22 arranging for a cherry picker to automatically do the
23 spraying.

24 MR. EYE: But we don't know.

25 MR. FRANTZ: But in any case, the point is

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1 we do have a model that would be used at the time of
2 the event to calculate the dose, because it has to be
3 based upon specific conditions that are then extant.

4 And two, we also have our other radiation
5 protection standards, including monitoring of
6 individual workers to ensure that they do not obtain
7 a lethal dose.

8 JUDGE GIBSON: Okay. Fair enough. If we
9 could turn to contention 4, Mr. Eye, you've asserted
10 that although the Applicant has listed at least 16, if
11 I counted correctly, mitigative strategies items, it's
12 your contention that they failed to describe how those
13 mitigative strategies would be implemented for this
14 full spectrum of damage states. Is that a fair
15 characterization of this contention?

16 MR. EYE: I believe it is, Your Honor.

17 JUDGE GIBSON: Now on page 25 of their
18 answer, the Applicant claims that what you're seeking
19 to do is to force the Applicant to address damage
20 states and he claims that the NRC regulations do not
21 require an evaluation of damage states.

22 Just first of all, do you agree that that
23 is what you're seeking to get them to address?

24 MR. EYE: Can I have one moment to review
25 something very briefly, Your Honor?

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1 JUDGE GIBSON: Yes.

2 MR. EYE: Thank you.

3 Your Honor, could I ask you to repeat the
4 question, please?

5 JUDGE GIBSON: Absolutely.

6 MR. EYE: Thank you. I appreciate it.

7 JUDGE GIBSON: Absolutely. You're
8 asserting that the Applicant has listed 16, if I
9 counted correctly, mitigative strategy items. And
10 you're contending that they failed to describe how
11 they would implement those mitigative strategies for
12 the full spectrum of damage states. And I just want
13 to make sure that that's the sum and substance of what
14 this contention involves, correct?

15 MR. EYE: Yes, sir.

16 JUDGE GIBSON: Now on page 25 of their
17 answer, the Applicant is saying that what you're
18 seeking to force them to do is to address damage
19 states and they claim they don't have to do that at
20 this point in time. And I just want to see if we can
21 at least get agreement that that is what you're trying
22 to get them to do. They say you can't make them do
23 it; you say you can, but I just want to make sure are
24 we saying the same thing. You are saying you've got
25 to address the damage states?

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1 MR. EYE: Yes, and more specifically, they
2 need to define what "event" means in that regard. So
3 if "event" encompasses a range of damage states, that
4 ought to be called out and defined in some way,
5 quantitatively or qualitatively, or both.

6 JUDGE GIBSON: Okay. Now in your reply in
7 response to what the Applicant raised, you said, well,
8 we're supported in this by 42 USC 2133(d) of the
9 Atomic Energy Act. I'm curious, is there any other
10 legal authority that you can provide to us for this
11 proposition?

12 MR. EYE: Well, the *Federal Register*
13 notice that directs that the mitigative strategies be
14 effective would be another kind of legal basis, and I
15 think it's complementary to 2133(d) of the Atomic
16 Energy Act.

17 JUDGE GIBSON: And not wanting to quibble,
18 but what specific part of the *Federal Register*?

19 MR. EYE: It's the citations that we've
20 given in our papers where it says that the mitigative
21 strategies are supposed to be effective.

22 JUDGE GIBSON: Okay. Fair enough.

23 MR. EYE: And, for example --

24 JUDGE GIBSON: We can search for the word
25 "effective," and we'll know where it was in

1 your --

2 MR. EYE: Well, I'll narrow it down a
3 little bit. It's page 13958, volume 74 of the *Federal*
4 *Register*. And there is a directive there that the
5 mitigative strategies be effective.

6 JUDGE GIBSON: Got it. Okay. Thank you.

7 Now, I think we heard this certainly
8 during the open session and a little bit less here,
9 the use of the word "flexible." Applicant is saying
10 that NEI 06-12 affords it a flexible response
11 capability for addressing a variety of conditions
12 involving the spent fuel pool and the reactor.

13 Now, do you agree or disagree that NEI 06-
14 12 contains that flexibility?

15 MR. EYE: It's one of the underlying bases
16 for the mitigative strategies, is that they be
17 flexible. We don't quibble that the mitigative
18 strategies ought to be flexible, but how far does that
19 flex go? We don't know. And they don't say.

20 JUDGE GIBSON: So you would agree with the
21 Applicant it does provide flexibility, but it doesn't
22 provide as much flexibility as you say it does? You
23 need to be more explicit?

24 MR. EYE: Well, they don't say how
25 flexible it is. They don't say the range of damage

1 states that they're mitigative strategies address. So
2 the Interveners don't quarrel with the fact that
3 response strategies ought to be flexible. They
4 should. It wouldn't work otherwise.

5 But on the other hand, there's a range of
6 flexibility. What is that range in the context of
7 these mitigative strategies? And that's a great
8 unknown in this whole proceeding.

9 JUDGE GIBSON: Okay. Mr. Frantz, did you
10 have anything you'd wanted to respond to that?

11 MR. FRANTZ: Not really. This seems to be
12 the same as contention 1 and contention 2. I think
13 we've already discussed those in detail.

14 JUDGE GIBSON: Okay. If we could go to
15 contention 5? This is another radiative exposure
16 contention. And this time, Mr. Eye, you criticize the
17 Applicant for inadequate specificity with respect to
18 persons other than emergency responders to a large
19 scale fire, is that correct?

20 MR. EYE: I think that emergency
21 responders are included in the population that this is
22 addressed to. I don't know that it necessarily limits
23 it to that.

24 JUDGE GIBSON: Okay.

25 MR. EYE: But this is about heroic

1 actions.

2 JUDGE GIBSON: Yes, but it does concern
3 people other than emergency responders as well,
4 correct?

5 MR. EYE: I'm sorry, yes, it could.

6 JUDGE GIBSON: Previously I think we were
7 talking about emergency responders, weren't we?

8 MR. EYE: Right. But this also goes to
9 emergency responders too and the nature of the
10 accident might be -- they might be called upon to
11 perform to achieve the regulatory objectives of
12 (hh) (2).

13 JUDGE GIBSON: Great. Okay.

14 Okay. And on page 19 of your reply, your
15 assessment is that absent preparing the specific
16 detailed information about radiation exposure at this
17 stage, the Applicant is going to be forced to
18 ~~undertake these heroic actions in the event of a major~~
19 emergency at the plant. Is that a fair statement?

20 MR. EYE: Yes.

21 JUDGE GIBSON: Okay. Now, the Applicant
22 claims that it has complied with the NEI 06-12 in this
23 regard and that it does not require that any such
24 study be met. Then in your reply you say, well, we're
25 not disputing NEI 06-12 per se, but instead with the

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1 Applicant's refusal to acknowledge that its mitigative
2 measures will not be effective under all damage
3 states.

4 Okay. We assume for the sake of argument
5 that you're right. Other than the Atomic Energy Act
6 42 USC 2133(d), is there any other legal authority
7 that would require the Applicant to undertake this
8 kind of a study at this phase of the proceeding?

9 MR. EYE: It's the same requirement that
10 they have to demonstrate that their mitigative
11 strategies are effective and that we would go back to
12 the *Federal Register* notice that puts that as sort of
13 the floor on what their mitigative strategies have to
14 be.

15 JUDGE GIBSON: Effective?

16 MR. EYE: Effective.

17 JUDGE GIBSON: The effective language you
18 talked about earlier?

19 MR. EYE: Correct.

20 JUDGE GIBSON: Would you care to respond
21 to that, Mr. Frantz?

22 MR. FRANTZ: Just very quickly. Again, as
23 we mentioned before, the Statement of Considerations
24 for the rule simply says we need to use readily
25 available resources and practical measures. We aren't

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1 required to postulate heroic measures. And in fact,
2 our mitigative strategies do not rely upon heroic
3 measures. To the extent he's saying we need to look
4 at the full spectrum of damage states, we've discussed
5 that at length and we don't believe that's required by
6 the rule.

7 JUDGE GIBSON: Okay. Mr. Eye?

8 MR. EYE: Your Honor, this really goes
9 back -- in a way this interrelates with the failure to
10 do dose projection modeling now.

11 JUDGE GIBSON: Yes.

12 MR. EYE: When they don't do that dose
13 projection modeling, we don't know whether heroic
14 actions will be required or not to respond in an
15 effective way to certain damage states. And, you
16 know, we're left guessing in terms of what kind of
17 harm we will be asking people to be exposed to. And
18 I don't want to necessarily -- well, I think that it
19 is a problem than once again the failure to specify
20 the damage states or to acknowledge that there are
21 damage states that they will not be able to control
22 assumes that there will have to be; or I think
23 presumes at that point, that if you can't use the
24 mitigative strategies or if the mitigative strategies
25 that are prescribed in NEI 06-12 and they've adopted

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1 are ineffective because it's in a damage state to
2 which those strategies don't respond, somebody's going
3 to have to do something to achieve the three goals of
4 50.54 (hh) (2). And to the extent that that goes above
5 and beyond mitigative strategies that they have
6 adopted, it seems that it's not only possible that
7 some heroic action will be required, it's likely.
8 It's almost assured. Otherwise, I don't know what
9 kind of response there would be.

10 I mean, it's really interesting in the NEI
11 06-12 that they say no heroic action should be
12 required to implement these mitigative strategies.
13 True. But on the other hand, we don't know what kind
14 of doses the on-site responders are going to be
15 exposed to. We don't have any idea and they're not
16 going to tell us until they've got a license in hand,
17 which we consider to be too late to find that out.

18 JUDGE GIBSON: Right. Okay.

19 Okay. If we could turn to contingent No.
20 6, Mr. Eye, you have asserted that the Applicant has
21 failed to provide mitigative strategies for the loss
22 of large area events during a reactor outage, is that
23 correct?

24 MR. EYE: Yes, sir.

25 JUDGE GIBSON: For this application?

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MR. EYE: Yes, sir.

JUDGE GIBSON: On page 20 of your petition, you say there are two arbitrary restrictions in NEI 06-12. First, that there is no need to consider the equipment to be out of service for routine maintenance activities; and secondly, that prior to an event for which there is a mitigative measure the plant systems are assumed to be in a nominal configuration with the reactor at 100 percent power. Is that a correct statement of what your contention is?

MR. EYE: Yes, sir.

JUDGE GIBSON: While I can appreciate that you don't agree with these restrictions, I'm curious as to how this Board could find that there was a genuine issue between you and the Applicant on this. Because it seems to me that other than to say they would say those are not arbitrary restrictions; you'd say they are, seems to me that's about the only thing we have a dispute about. I think they're probably in agreement those things don't need to be done. You're saying though that they're arbitrary restrictions.

Now, are we basically in some kind of a challenge to the guidance document itself at this point by saying that this is bad policy?

1 MR. EYE: No, we're saying that if there's
2 not a mitigative strategy that addresses the higher
3 vulnerability of the plant during an outage, then what
4 you're doing is jeopardizing the public's health and
5 safety contrary to 42 USC 2133(d). And, that that's
6 not an effective mitigative strategy so that they're
7 not in compliance with 50.54(hh)(2). A plant being in
8 outage status isn't anything all that unusual. It
9 happens.

10 JUDGE GIBSON: Okay.

11 MR. EYE: And the idea that they can
12 assume that they can build their entire mitigative
13 strategy around nothing but the plant being at 100
14 percent power, means that they've excluded an entire
15 range of possibilities that aren't just speculative.
16 These plants go into routine outages. I mean, that's
17 the nature of the routine. They go down periodically
18 for refueling and maintenance and so forth. There's
19 nothing in the Statement of Consideration that says
20 they shouldn't deal with outage status. Nothing in
21 there excuses them from this very expected plant
22 configuration, being in an outage status. And yet,
23 even though there's a recognition; I think that it's
24 fairly well accepted, that a plant in an outage status
25 represents a situation where it may be more

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1 vulnerable. The reactor cover may be off. There may
2 be transport of fuel. The spent fuel pool may be in
3 a configuration where there's a higher concentration
4 of spent fuel that's just been downloaded from the
5 reactor, off loaded from the reactor. And as pointed
6 out, systems will be down for maintenance that would
7 otherwise be there to help mitigate the effects of
8 potential fire and explosions.

9 So here we have an entire expected
10 scenario. There's nothing speculative about this
11 scenario that is not accounted for at all. And yet,
12 the mitigative strategies that the Applicant suggests
13 don't address anything but the nominal 100 percent
14 power configuration.

15 JUDGE GIBSON: Yes.

16 MR. EYE: It's the Russian roulette
17 situation. They hope they don't get hit during an
18 outage. Well, okay. But, you know, what if you do?
19 Do you account for that in the mitigative strategies,
20 particularly with the mitigative strategies SOC
21 directs that these be done in something that would be
22 effective strategies? And the rule itself makes no
23 reference to anything but this potentially happening
24 any time 24/7, 365. It doesn't excuse them taking
25 this into account. There's nothing explicit in the

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1 rule that says you can assume that an impact will not
2 happen during an outage.

3 JUDGE GIBSON: Okay. And I think
4 previously we established that the NEI 06-12 guidance
5 document, while accorded a special status by the
6 Commission in terms of if you comply with this, you'll
7 comply with 50.54(hh)(2), is still not a frontal
8 attack on the regulations which would be impermissible
9 in this proceeding. But obviously I just need to
10 know, are you basically saying that this guidance, at
11 least in these two respects, is wrong and it would be
12 improper for the Applicant to follow it and not to
13 provide for these two conditions that you say it needs
14 to provide?

15 MR. EYE: The two conditions being reactor
16 outage or --

17 JUDGE GIBSON: Yes.

18 MR. EYE: Yes.

19 JUDGE GIBSON: That you listed here?

20 MR. EYE: Yes.

21 JUDGE GIBSON: Okay. I just want to be
22 sure I understood your condition.

23 Now, Mr. Frantz?

24 MR. FRANTZ: This has been much more
25 complex than it needs to be. I think the NEI guidance

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1 document simply uses 100 power because that's
2 typically the most limiting condition, the bounding
3 state for the reactor.

4 All of our mitigative strategies, I
5 believe, are also able to be used during outage
6 conditions.

[Redacted block containing (b)(4)]

7
8 Therefore, if they're out for
9 maintenance, it doesn't really matter.

10 JUDGE GIBSON: Okay. So, you're saying
11 that the outer boundary of this risk is full power?

12 MR. FRANTZ: I think so.

13 JUDGE GIBSON: Is that correct?

14 MR. FRANTZ: I believe, yes.

15 JUDGE GIBSON: And an outage would be
16 something less than the worst case scenario, if you
17 will, for having one of these fires or explosions?

18 MR. FRANTZ: I think that's --

19 JUDGE GIBSON: Is that a fair statement?

20 MR. FRANTZ: That's a fair statement.

21 JUDGE GIBSON: Okay.

22 MR. FRANTZ: And take an example, he was
23 worried about having spent fuel being moved from the
24 reactor into the spent fuel pool and the accident
25 occurring right then when the heat load is greatest in

*EXEMPTION 4
SOUTH TEXAS*

1 the spent fuel pool. The fact of the matter is, our
2 mitigative strategies are applicable even in that
3 condition.

[Redacted block containing (b)(4)]

(b)(4)

7 So if they believe that our mitigative
8 strategies are not adequate for outage conditions,
9 it's incumbent upon them to specify which ones aren't
10 and to tell us why they aren't.

11 JUDGE GIBSON: Okay. Fine. But I just
12 wanted to make sure I understand. You're saying that
13 the outer boundary for worst case risk would be the
14 reactor being running as opposed to being out?

15 MR. FRANTZ: That's generally true, and
16 but I'm saying even if it weren't true, our mitigative
17 strategies would still be applicable.

18 JUDGE GIBSON: And with respect to
19 equipment to be out of service for routine maintenance
20 activities, that was the other issue?

[Redacted block containing (b)(4)]

(b)(4)

23 JUDGE GIBSON: And you're saying that is
24 basically the outer boundary?

25 MR. FRANTZ: Yes.

EXEMPTION 4
SOUTH TEXAS

EXEMPTION 4
SOUTH TEXAS

1 JUDGE GIBSON: The most conservative
2 assumption for risk assessment that you could --

3 MR. FRANTZ: Yes.

4 JUDGE GIBSON: Is that correct?

5 MR. FRANTZ: Yes.

6 JUDGE GIBSON: Okay. Now, Mr. Eye, it's
7 the Applicant's position that these two criticisms
8 that you've made of NEI 06-12 that you say are
9 arbitrary, they say are the most conservative
10 assumptions that could be made for risk assessment
11 purposes. And can you help us understand why that's
12 not the case?

13 MR. EYE: Well, as we say, during outages
14 the risk of core damage is higher, significantly
15 higher than when it's in an operational status at full
16 power. And we make that assertion in our contention
17 and it's supported by Dr. Lyman. I mean, that's part
18 of it.

19 JUDGE GIBSON: Okay. The other one had to
20 do with the maintenance equipment.

21 MR. EYE: That's out of service or
22 otherwise not available. Well, to the extent that
23 maintenance equipment and safety systems are down for
24 maintenance, safety systems are down for maintenance
25 or other systems that would be relied upon in some way

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1 for their mitigative strategies, if those systems are
 2 not available, then they've got a compromised
 3 mitigative strategy.

4
 5 (b)(4)
 6
 7

*Exhibit 4
 South Trends*

8 MR. FRANTZ: And we would have our normal
 9 safety-related systems available. That's correct.

10 JUDGE GIBSON: Okay. Now, you know, the
 11 argument here is they're saying they made the most
 12 conservative assumptions and you're saying that they
 13 didn't.

14 MR. EYE: Well, they don't address outages
 15 at all.

16 JUDGE GIBSON: Okay.

17 MR. EYE: At all.

18 JUDGE GIBSON: Well, let's set aside
 19 equipment for a second and let's just focus on
 20 outages. Okay? Now, the concern here Mr. Eye has
 21 expressed that you did not address outages.

22 MR. FRANTZ: Yes.

23 JUDGE GIBSON: Okay? Now, you said but
 24 that's the most conservative assumption is that we're
 25 going full bore. So I want to understand what is the

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1 concern here? Why did you not address this concern?
2 Why was it not necessary?

3 MR. FRANTZ: Yes, I'm saying typically the
4 full power is the most conservative condition. I'm
5 saying it doesn't really matter. Our mitigative
6 strategies are available in either case, whether it's
7 outage or non-outage at full power operation. Those
8 strategies are available and we have not seen anything
9 from the Interveners that would attack the efficacy of
10 those strategies in an outage condition.

11 [Redacted]
12 (b)(4)

13 JUDGE GIBSON: Yes.

14 MR. FRANTZ: Same as we do at full power
15 operation.

16 JUDGE GIBSON: Okay.

17 MR. FRANTZ: We're going to have our fire
18 protection system available in an outage condition
19 just like we do in full power operation.

20 [Redacted]
21 (b)(4)

22 JUDGE GIBSON: Okay. I think Judge Arnold
23 has got a question.

24 ADMIN. JUDGE ARNOLD: Yes, for Mr. Eye.
25 You bolster your argument on the basis of core damage

EXEMPTION 4
SOUTH TEXAS

EXEMPTION 4
SOUTH TEXAS

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1 frequency during outages as opposed to during at-power
2 conditions. Most of the evaluations of core damage
3 frequency that I've seen concentrate on internal
4 causes of core damage, internal events, whereas a fire
5 is an external event. Do you have anything that would
6 support that the effects of an external fire during a
7 shut down condition are more likely to lead to core
8 damage than they are during at-power operations?

9 MR. EYE: Can I have a moment, sir?

10 The probabilistic risk assessment should
11 be considered the same whether it's an internal or an
12 external event, or they generally show that it's the
13 same whether it's an internal or external event. So
14 the contribution of a shut down risk is the same
15 whether it's an external or internal event.

16 Let me point one other very common sense
17 practical aspect of this. You pointed out fires,
18 Judge Arnold. This is covering explosions as well.
19 During an outage frequently the reactor cover is off
20 and the capacity to protect that reactor core from the
21 effects of an explosion would therefore be compromised
22 because the cover is removed. That's not taking into
23 account at all and of the mitigative strategies. So
24 explosion effects have to be considered along with the
25 effects of fires as well, because after all it's in

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1 the Fires and Explosions Regulation.

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(b)(4)

EXEMPTION 4 SOUTH TEXAS

10 ADMIN. JUDGE ARNOLD: Thank you.

11 MR. SPENCER: Your Honor, I'd just bring
12 this back to we're dealing with contention
13 admissibility and if the Interveners thought that
14 there was a problem with any one of the mitigative
15 strategies and they thought that it didn't
16 sufficiently cover an outage condition, it was their
17 burden to point out that mitigative strategy or
18 strategies, explain why they did not think it would
19 cover outage conditions and provide basis for that.
20 And they simply did not do that. And so, our position
21 is that for that reason alone the contention is not
22 admissible.

23 MR. EYE: May I?

24 ADMIN. JUDGE ARNOLD: Certainly.

25 MR. EYE: That's exactly what the

1 contention is about. I mean, that's exactly what
2 we're alleging here is that there is a gap in their
3 mitigative strategies because they don't cover
4 anything about 100 percent power status. That's what
5 we've alleged.

6 MR. SPENCER: Your Honor, maybe I wasn't
7 clear, but what I was meaning to say is they did not
8 point out their mitigative strategies in the South
9 Texas application. They did not point out any of
10 those strategies. They didn't say strategy X, Y or Z
11 was deficient because it does not adequately account
12 for outage conditions. And that's not in their
13 contention.

14 MR. EYE: Well, it's hard to point
15 something out that's not there. All we pointed out
16 was the omission of it.

17 JUDGE GIBSON: Judge Charbeneau?

18 ADMIN. JUDGE CHARBENEAU: I've got a very,
19 very quick question. If STP is licensed for four
20 units, would there ever be a time when all four would
21 be under outage?

22 MR. FRANTZ: There's no legal prohibition
23 to that occurring, but in reality you'd stagger them.
24 Typically you have a spring and a fall outage, and
25 typically you might have, for example, two-year

1 periods. And so the typical situation would be you'd
2 probably have one outage per reactor every half-year.

3 ADMIN. JUDGE CHARBENEAU: Thank you.

4 JUDGE GIBSON: Every half year?

5 MR. FRANTZ: Yes, every six months. So
6 you'd have --

7 JUDGE GIBSON: Oh, so you'd have one --

8 MR. FRANTZ: Yes.

9 JUDGE GIBSON: One would of them would be
10 down every six months?

11 MR. FRANTZ: Yes.

12 JUDGE GIBSON: Okay.

13 MR. FRANTZ: Yes.

14 JUDGE GIBSON: Okay. I hear you.

15 MR. EYE: May we just comment on that
16 briefly?

17 JUDGE GIBSON: Please.

18 MR. EYE: But that doesn't take into
19 account, of course, forced outages. The routine
20 outages, of course, could be staggered as counsel
21 suggests, but that doesn't account for that forced
22 outage status.

23 JUDGE GIBSON: Okay. Mr. Eye, on page 22
24 of your reply you assert that Dr. Lyman has
25 articulated the reasons that the omitted information

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1 should be included in the mitigative measures. Now,
2 I'm certainly not challenging Dr. Lyman's expertise in
3 any way, but I found that confusing about what he is
4 attesting to in his opinion. Seems to me that it
5 would be completely appropriate for him to provide
6 information to support a factual allegation, but it
7 seems to me that what he's essentially saying here is
8 that it would be better policy if the Commission had
9 reached a different conclusion. Do you disagree with
10 my reading of that?

11 MR. EYE: I disagree with your
12 interpretation of it, Your Honor.

13 JUDGE GIBSON: Okay.

14 MR. EYE: I think that Dr. Lyman has
15 attempted to point out that there is a gap in
16 mitigative strategies that doesn't get dealt with at
17 all. And so, would it be better policy if it were
18 written -- well, would it be clearer policy if it were
19 in the reg or explicitly spelled out in the SOC? It
20 would be easier to deal with here, but we're not here
21 to deal with stuff that's easy.

22 JUDGE GIBSON: Right.

23 MR. EYE: Or else we wouldn't be here at
24 all.

25 No, I think that Dr. Lyman's -- the force

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1 of this contention in this regard really goes to that
2 we've got a plant status, and, as Dr. Charbeneau
3 pointed out, or the question that Dr. Charbeneau asked
4 just a moment ago about, you know, the possibility of
5 having more than one unit down at a time for an
6 outage, or up to four units at a time, really is, I
7 think, part and parcel of Dr. Lyman's contention. You
8 know, moreover, presumably if they get advance --
9 they, the operators at STP 1, 2, 3 and 4, get an alert
10 that there are aircraft or, you know, other threats on
11 the way, presumably they'd have to put all these
12 reactors into a rather rapid shutdown mode. And
13 again, that's not covered in any part of their
14 mitigative strategies.

15 So, I mean, I can understand how you might
16 read it that way, but I think that the interpretation
17 that we would intend goes to this contention of this
18 omission idea that it's not geared toward whether it's
19 good or bad policy. It's geared toward whether you've
20 got an effective mitigative strategy that covers
21 anything other than 100 percent nominal power
22 configuration.

23 JUDGE GIBSON: Okay. Anything more on 6?

24 ADMIN. JUDGE ARNOLD: No.

25 JUDGE GIBSON: If we could turn to

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1 contention No. 7. Mr. Eye, you've asserted that the
2 Applicant erred in failing to provide mitigative
3 strategies for the possibility that there will be
4 inadequate water for emergency reactor cooling, spent
5 fuel pool cooling and suppression of multiple fires.

6 Is that what this contention concerns?

7 MR. EYE: Without adding the basis for it
8 for that it's not considered under a full spectrum of
9 damage states. I would add that to your description.

10 JUDGE GIBSON: Okay. Thank you for that
11 clarification.

12 The Applicant claims that you have mis-
13 characterized its mitigative strategies report
14 regarding water availability. And if you'll turn to
15 37 of its answer, the Applicant asserts that this item
16 is addressed in the Mitigative Strategies Table and it
17 then quotes from the report and asserts that abundant
18 water supplies exist on site as identified in section
19 7.6. I think that's maybe on page 38 of the answer.

20 So, the Applicant's challenge is basically
21 what's the beef? What is the issue in dispute between
22 you and the Applicant?

23 MR. EYE: It's less a function of quantity
24 of water and the capacity to get the water from where
25 it is to where you need it, and the full spectrum of

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1 damage states or at the extreme part of the damage
 2 spectrum, or perhaps at a less extreme point in the
 3 damage state. We don't know because the Applicant
 4 doesn't tell us what part of the spectrum they are
 5 covering with their mitigative strategies. So we're
 6 left to guess about that, because they won't tell us.
 7 It goes to the loss of the pumps and pipes that are
 8 necessary to move water from where you've got it to
 9 where you need it. And the loss of that basic
 10 infrastructure under various damage states compromises
 11 their capacity to have effective mitigative
 12 strategies. Their mitigative strategies depend upon,
 13 one, the capacity for those pumps and pipes to be in
 14 place and functioning.

[Redacted block]

(b)(4)

17 And we're simply saying that under the
 18 first scenario where there's a lack of basic pumps and
 19 pipe infrastructure

[Redacted block]

(b)(4)

20 there's no
 21 assurance that will be adequate or effective to do
 22 everything that's needed at the time, make-up water
 23 for the spent fuel pool, make-up water for the
 24 reactor, plus fighting fires, that you don't have the
 25 built-in infrastructure to use to fight if in fact the

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1 damage state is sufficient that it's compromised or
2 destroyed that infrastructure.

3 So, I mean, this contention, although it's
4 premised with the discussion about abundant water
5 supplies, really is more about the capacity for
6 adequate pumping to get the water where you need it
7 under all damage states.

8 JUDGE GIBSON: And I think you've
9 addressed that in your pleading on page 24 of your
10 reply.

11 Okay. Mr. Frantz, seems to me that what
12 the Interveners are saying is that your position is
13 dependent on an infrastructure of pipes and pumps that
14 would have to remain intact and functional during an
15 event. Is that going to be the case? Have you made
16 adequate provision for that?

17 MR. FRANTZ:

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21 (b)(4)
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(b)(4)

And in

that context, we said we had abundant water supplies and therefore we don't need to go out and contract for an off-site water supplier. That's all this is saying. And so to the extent he's criticizing this, with the other arguments he's raised, it's not a valid criticism. He's not addressing our application in our mitigative strategies report.

We have other items in our report that address water supplies for the spent fuel pool, water supplies for the core. And his contention does not mention those, it does not contest those. You know, even if you ignore the fact that he has taken this statement out of context, the fundamental premise I think is just flatly inconsistent with the regulations for an admissible contention.

(b)(4)

MR. EYE: Stand corrected. Thank you.

MR. FRANTZ: And if he does not believe

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1 that those are adequate, it's his burden to come
2 forward with something that would indicate some basis
3 to indicate that those are not adequate. He's not
4 done so. And he's trying to shift the burden to us,
5 and that's inappropriate. It's his burden initially
6 to come forward with some basis for believing that our
7 pumps and our water supplies are not adequate, and
8 he's not done so.

9 JUDGE GIBSON: Mr. Eye?

10 MR. EYE: Yes, thank you, Your Honor.
11 First of all, the reference to MST page 34 is simply
12 to point out that they're operating under the premise
13 that they have plenty of water. But if you read the
14 rest of the contention, it's not keyed to that
15 particular part of the Mitigative Strategies Table.
16 It goes beyond that and talks about adequate
17 infrastructure to move the water where it's actually
18 needed at the time that the mitigative strategies need
19 to be implemented. So, I mean, you can I suppose
20 limit the scope of that contention if that's how you
21 choose to interpret it, but it really isn't everything
22 that contention is about. It's about is the
23 infrastructure going to be available when it's
24 actually needed?

25 And moreover, just if the contention in

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(b)(4)

MR. EYE: Mr. Frantz, irrespective of whether Mr. Eye drafted his contention well, can you provide some assurance to him that there is an adequate infrastructure in place, because that is a concern that the Interveners have raised.

(b)(4)

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[REDACTED]

(b)(4)

EXEMPTION 4
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JUDGE GIBSON: And those things presumably would not be affected by the event and instead would be available in the event there was this catastrophic event?

MR. FRANTZ: That's correct, because they're outside the target area.

JUDGE GIBSON: Okay.

MR. EYE: Well, Your Honor, it counts on electricity to drive the pumps and you've got a station blackout because of the initiating event, then that pump's not available.

No. 2, that assumes that there's only essentially one target that's going to be hit, and I don't know that that's a realistic assumption. There's nothing in the Statement of Considerations or the regulation itself that says, oh, by the way, you may assume that there's only one target that's going to be affected. And there's nothing in the mitigative strategies or the regulation itself that says you don't have to worry about the pumps being available and you don't need to assume that they're not targeted. It's kind of wishful thinking on the part

1 of the Applicant that a catastrophe will happen
2 according to the plan.

3 [Redacted]
4 [Redacted]
5 [Redacted] And I'm simply arguing that

6 this aspect of the loss of the infrastructure to move
7 water where you want it when you need it is a gap in
8 their mitigative strategies, and certainly is contrary
9 to what the Statement of Considerations asserts as a
10 requirement that these strategies be effective.

11 MR. FRANTZ: And we're just back to where
12 we were earlier today, that he's arguing that we need
13 to mitigate everything. And first of all, that's not
14 possible. If you assume we'd wipe out everything on
15 site, there's no way you can mitigate that event.
16 That's not practical and it's not possible, and the
17 regulation simply does not require that. So again,
18 what he's doing is challenging the adequacy of your
19 regulation, and that is not permissible for a
20 contention.

21 MR. EYE: He interprets the regulation to
22 say you can assume that you'll never have to anything
23 more than what's required under the scenarios that you
24 want to assume will happen. So they're in effect
25 regulating themselves in this regard. And they want

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1 to be the final arbiter of not only the size of the
 2 loss of plant due to fire and explosion. They want to
 3 be the final arbiter as to how much of their pumping
 4 capacity might be compromised or lost. They want to
 5 be the final arbiter of determining which methods will
 6 be available post-explosion and fire and which ones
 7 will not be. It's effectiveness. And they bring out
 8 their mitigative strategies and they say these are
 9 effective. And we point out where there are gaps in
 10 our contentions of omission. That's the function of
 11 this. And we're not suggesting that they have to
 12 mitigate for everything. I don't think we've said
 13 that anywhere in our papers or in our arguments here.
 14 But on the other hand, it's reasonable for them to
 15 anticipate damage states; for example, in this
 16 contention, where they've lost the infrastructure
 17 necessary to move water from where it is to where they
 18 need it.

19 MR. FRANTZ: We are not asking to be the
 20 final arbiter and we are not the final arbiter; the
 21 Commission is.

[Redacted]

(b)(4)

22 [Redacted]
 23 We're following that
 24 guidance. So we're just following what the Commission
 25 had laid down. We're not deciding anything ourselves

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1 in terms of what the policy should be.

2 MR. EYE: NEI 06-12 is for current
3 reactors, not for Applicants.

4 JUDGE GIBSON: Well, I think we understand
5 your position, Mr. Eye, Mr. Frantz. I think we your
6 understand your positions. I think you all have done
7 a good articulating them today.

8 I think we have a few little housekeeping
9 items we did not include with our discussion about
10 subpart G.

11 I believe you were going to tell us, Mr.
12 Eye, what it was about subpart G that you could not
13 say in the open session that was important for
14 purposes of formal discovery/cross-examination.

15 MR. EYE: Right. And I can't remember for
16 sure what all we did cover during the open session,
17 and to the extent that this is redundant, I apologize.
18 The point --

19 JUDGE GIBSON: I'd say that redundancy
20 sometimes has been fit, at least when it comes to
21 nuclear reactors. So, you know, you're in good
22 company.

23 MR. EYE: Thank you, Your Honor.

24 We want to get to the bottom of the
25 disclaimers. Somebody wrote those. Somebody wrote

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1 those based upon sets of facts that presumably were in
2 front of them. These disclaimers, the high-level
3 insights, those are statements of fact that we want to
4 do discovery on. We want to see the underlying
5 factual bases for those assertions. And we want to be
6 able to cross examine witnesses to find out precisely,
7 one, what they were instructed to do, how they were
8 instructed to do it, what evidence did they gather,
9 how did that evidence get analyzed and how did it end
10 up in NEI 06-12 as a list of so-called high-level
11 insights?

12 These high-level insights, although they
13 only encompass a page, I'm presuming, given the
14 breadth and depth that they represent, must have a
15 rather significant underlying factual basis. And
16 then, once we discover the underlying factual basis,
17 we want to be able to cross examine those who authored
18 it or edited it, or however it got into its final
19 form, to determine precisely how they gathered their
20 information, how they analyzed it and how it was
21 presented.

22 So to the extent that subpart G
23 anticipates that these would be eyewitness events,
24 well those are eyewitness events. The gathering of
25 information, the analysis of information, the

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1 presentation of information, the conclusions that are
2 drawn from it, those are eyewitness first-hand
3 accounts.

4 And I think as I mentioned this morning,
5 the idea that we recognize that subpart G is not a
6 frequently used mechanism, we accept. But on the
7 other hand, there are times when it is appropriate.
8 And we contend that this is one of those times, given
9 that these high level insights have so much
10 significance to determining whether or not the
11 mitigative strategies that have been offered up by the
12 Applicant are adequate and, let me use the term of
13 art, effective.

14 JUDGE GIBSON: Okay. Before I let you
15 respond, Mr. Frantz, or the staff, I want to just
16 throw out a question that was occurring to me while
17 you were talking.

18 What is the relevance of the basis for the
19 high-level insights that the authors of NEI 06-12
20 reached to this proceeding? My thinking is this:
21 Okay? You know, it's a little bit like, you know, the
22 parol evidence rule. Okay? I mean, we've got a bunch
23 of drafts, a bunch of ideas that are going into this
24 final document. This final document gets prepared.
25 It gets issued in final form after a long iterative

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1 process presumably by these experts. The Commission
2 then looks at it and concludes this would be a
3 legitimate basis for complying with 50.44(hh)(2).
4 Okay?

5 Now, I could understand the relevance of
6 50.54(hh)(2). I could understand the relevance of NEI
7 06-12. But I'm not sure about the relevance -- I'm
8 not saying it isn't relevant. I'm just saying I'm not
9 sure of its relevance to this proceeding.

10 MR. EYE: It's party the way we structure
11 our contentions. Because as you aware ad nauseam now,
12 the fact of the matter is we've tied a lot of our
13 contentions to this damage state.

14 JUDGE GIBSON: Right.

15 MR. EYE: And it's described in only kind
16 of general terms in the high-level insights. But our
17 theory is, if you will, that makes this relevant is
18 that those damage states, however they're defined and
19 described in the underlying documents that we believe
20 support the high-level insight about the damage state
21 problem would help us determine whether or not the
22 mitigative strategies that have been offered up by the
23 Applicant are effective, or would be effective when
24 called upon to be implemented. In other words, it
25 would help us determine where to peg their mitigative

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1 strategies, the effectiveness of their mitigative
2 strategies on the damage spectrum, because the
3 Applicant won't do it. So we have to go about doing
4 it in some other way. We have to be able to show that
5 the damage spectrum that the authors of NEI 06-12
6 postulate is one thing. Then we can take the
7 Applicant's mitigative strategies and measure it
8 against the damage spectrum state, the damage state
9 spectrum rather, that the authors of NEI 06-12 have
10 developed, because there's obviously a spectrum out
11 there of damage that's been developed. It's
12 referenced in that high-level insight.

13 JUDGE GIBSON: Well, recognizing it's been
14 developed, you know, I'm not convinced, although I'm
15 not saying it's, you know, not relevant, I'm not
16 convinced of its relevance at this point. I mean, it
17 sounds to me like, you know, probabilistic risk
18 assessment stuff, you know? That somebody threw in
19 this preamble to explain, you know, this is basically
20 what this report says, but it's not part of the
21 compliance with 50.54(hh)(2). They basically say
22 these are things that aren't addressed in this.

23 MR. EYE: It's part of the non-compliance.
24 It's part of the way that we would argue is to show
25 ineffective response to the requirements under

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1 50.54(hh)(2). I mean, part of the disconnect here is
2 that the Applicant says, well, we don't have to worry
3 about the full spectrum of damage states. It's just
4 not a regulatory requirement. We say you do have to
5 consider that if you're going to have effective
6 mitigative strategies.

7 Then, you go from that to the fact that
8 the Applicant will not tell us how much of the damage
9 spectrum their mitigative strategies actually
10 addresses and covers. So our idea would be to go back
11 upstream and find out what that spectrum is that's
12 been developed in NEI 06-12, that's referenced I
13 should say in 06-12, and use that to measure the
14 effectiveness of the Applicant's mitigative
15 strategies.

16 JUDGE GIBSON: Okay. Fair enough.

17 Mr. Frantz?

18 MR. FRANTZ: What he wants is to use
19 subpart G procedures to question basically the author
20 of a guidance document. If you look at section
21 2.3.01(d) which governs use of subpart G procedures in
22 the regulations, there's no provision there for using
23 subpart G to question an author of a guidance
24 document. And in fact, in all of the NRC proceedings
25 invariably there are guidance documents at issue. And

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1 if there were this exception for the use of
2 questioning an author of a guidance document, we'd
3 have subpart G procedures used in every proceeding.
4 It would be unlimited.

5 The Commission instead has characterized
6 subpart G as an extraordinary circumstance and it's
7 limited to cases where you actually have to look at
8 the credibility of an eyewitness. An author is not an
9 eyewitness. An author of a guidance document is
10 simply an author. It's not an eyewitness.

11 It also allows for subpart G in cases of
12 motive or intent. Again, we aren't dealing with
13 motive or intent here. Subpart G typically is
14 appropriate in cases where you have a past activity
15 such as non-compliance with the regulation and there's
16 an enforcement action in question. When you have an
17 eyewitness as to what actually occurred and what the
18 intent of the actor was in that case. We aren't
19 dealing with any of that here. There just is no valid
20 basis for having subpart G simply because they don't
21 like the guidance document.

22 JUDGE GIBSON: Okay. Staff?

23 MR. SPENCER: Your Honor, I would agree
24 with Mr. Frantz and in addition say that I just do not
25 see how the intent of an author of a guidance document

1 could be relevant to this proceeding. First of all,
2 it's an NEI guidelines document, but the Commission
3 presumably endorsed NEI 06-12 based upon the contents
4 of NEI 06-12, rather than, you know, asking and trying
5 to figure out which particular person was responsible
6 for which particular text and what their opinion was
7 on that text, and what the basis for that was. So I
8 just don't see any relevance to that at all.

9 And I will mention that under subpart L
10 there is the possibility of motions for cross
11 examination. Having said that, I do not see that that
12 would be appropriate for the author of some text in
13 the NEI 06-12, if that person could even be
14 identified.

15 JUDGE GIBSON: Okay. Thank you.

16 Mr. Eye?

17 MR. EYE: Well, I think identifying
18 witnesses is something that, you know, is done every
19 day in the course of litigation. You ask who did.
20 And presumably, there is a person or persons who are
21 responsible for authoring that document. So that's
22 not really an impediment.

23 It's less about the intent of the authors
24 and more about the basis for their opinions. They've
25 stated an opinion in NEI 06-12. They stated opinions

1 that are characterized as high-level insights based on
2 information that they've gathered. We want to know
3 the basis for those opinions. And then we can start
4 doing some careful analysis whether or not the
5 mitigative strategies are adequate and effective.

6 JUDGE GIBSON: Thank you.

7 Okay. At the end of our oral argument in
8 Bay City we afforded each of you an opportunity to do
9 a sort of mini closing argument that could address any
10 matters that were not addressed to your satisfaction
11 during the course of oral argument. I'm not
12 suggesting that we need to do that today. I'm not
13 also not going to want to deprive anyone if they're
14 going to walk away here, you know, and feeling really
15 mad because they didn't get a chance to say something
16 that was really central to their argument that was not
17 addressed.

18 So, let me just ask you all, do you all
19 need to say anything more, or have we addressed the
20 concerns that you have raised?

21 Mr. Eye?

22 MR. EYE: I would opt for a brief closing,
23 but I don't expect.--

24 JUDGE GIBSON: Could you do it in three
25 minutes?

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1 MR. EYE: I probably could. If that what
2 the order is, that's what I'd do.

3 JUDGE GIBSON: All right. Why don't we
4 take a five-minute break and you can each have three
5 minutes to address any matters that you feel we did
6 not address satisfactorily. And so we'll be back in
7 five minutes. Okay? Thank you.

8 (Whereupon, at 4:13 p.m. off the record
9 until 4:19 p.m.)

10 JUDGE GIBSON: All right. Staff?

11 MR. SPENCER: We have nothing to add, Your
12 Honor.

13 JUDGE GIBSON: Mr. Frantz?

14 MR. FRANTZ: Just very quickly; I think
15 it's two sentences. Everything we've heard today from
16 the Interveners and also in their pleadings is
17 inconsistent with the rule itself, with the Statement
18 of Considerations of the rule and with the NRC-
19 endorsed guidance for the rule.

20 Basically, what they're asking is to
21 substitute their judgment for what policy should be
22 for the Commission's judgment. And as such, that
23 constitutes an impermissible attack on the
24 regulations. And therefore, the contention should be
25 rejected.

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1 JUDGE GIBSON: Mr. Eye?

2 MR. EYE: Thank you. We ask the Panel to
3 engage in a common-sense-kind of evaluation of what's
4 been presented to you as an effective mitigative
5 strategy set. Common sense. You cannot go through
6 that mitigative strategy submittal and determine to
7 what it's going to apply. It's not there. And as
8 much as we've tried to extract that information from
9 the Applicant, they've resisted at every step of the
10 way to be specific in that regard.

11 This is a pig in a poke problem. They
12 want you to accept the mitigative strategies without
13 telling just exactly how much they're going to work,
14 how well they're work, under what conditions. We're
15 talking about the public health and public safety
16 here. It shouldn't be left to chance and assume that
17 because they wave around NEI 06-12 that all these
18 issues about the scope of the strategies and the
19 effectiveness of the strategies are somehow taken care
20 of in NEI 06-12, a nuclear industry-generated
21 document. That while designated in the SOC as a means
22 by which these Applicants can meet their burden, that
23 was before any litigation occurred. That was before
24 the adversarial process took hold to point out the
25 deficiencies, the weaknesses, the lack of

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1 comprehensive coverage that these mitigative
2 strategies have resulted in or would result in.

3 We don't know any of the Applicant's
4 assumptions about what will be covered by these
5 mitigative strategies. --NEI 06-12, while embraced, is
6 not the proper document that they ought to be relying
7 on because it's not been approved for new reactor
8 Applicants. It's been approved for current operating
9 reactor licensees.

10 On the other hand, we do have something in
11 the works, ISG 16, which would presumably illuminate
12 this a little bit more. Now whether it will be enough
13 to satisfy Applicant or the Interveners is unknown,
14 and we will have to simply cross that bridge when we
15 come to it. But to make the assumption that NEI 06-12
16 is an adequate basis to judge the mitigative
17 strategies by, I think as a matter of law would be
18 questionable because of the limitation that's
19 specified in the SOC, that it's applicable only to
20 current licensees.

21 On the other hand, to the extent that NEI
22 06-12 does tell us that the mitigative strategies may
23 not be effective under all damage states, it does
24 raise, if you will, an alarm. Because do the
25 mitigative strategies that have been developed by the

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1 Applicant cover any part of the damage spectrum? We
 2 don't know. Does it cover 10 percent of it? Fifty
 3 percent of it? Ninety percent of it? We don't know.
 4 And yet there is a damage spectrum, but it's been
 5 ignored by this Applicant.

6 [Redacted] and
 7 [Redacted]

8 why should that necessarily be embraced? It has not
 9 been empirically tested. There's no way to know
 10 whether or not that's a reasonable spacial separation.

11 We have developed these fires and
 12 explosions contentions because of the seriousness that
 13 the Commission has attached to the need to have
 14 effective strategies. The adversarial process has
 15 brought out weaknesses in the Applicant's mitigative
 16 strategies, weaknesses that represent omissions, that
 17 allow the contentions that we've developed to advance
 18 to another stage in the adjudication. And we would
 19 ask that this panel admit those contentions so that we
 20 can try to get to the bottom of some of these
 21 questions that we've raised in this proceeding.

22 And thank you for your attention
 23 throughout.

24 JUDGE GIBSON: Thank you.

25 As occurred in Bay City, I want to commend

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1 counsel for a very well-run oral argument and for your
2 civility to each other. I think it speaks well for
3 all of you.

4 Before we recess, I think it would be
5 appropriate to mention that I personally, at least,
6 and I think this is something that's shared by the
7 other board members as well, have great concerns about
8 the restrictions that were placed on our ability to
9 hold this oral argument in public by virtue of these
10 SUNSI designations. While I appreciate the fact that
11 there is material that should not be disclosed that
12 would be dangerous in the hands of the wrong people,
13 I think that it would be fair to say that the vast
14 bulk of the material that we discussed here could have
15 been discussed in the open.

16 I think that if you look at the criteria
17 for SUNSI, I question whether all of the material that
18 was filed here as SUNSI, the sort of the wholesale
19 dumping it in there and calling it SUNSI is beneficial
20 to the public. And certainly I personally, at least,
21 as the result of this experience, would like to see
22 some better way of classifying material. I know when
23 I was in your shoes and I was representing clients,
24 and I was having to appear before courts, and I was
25 having to justify privilege claims, I was not able to

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1 make a wholesale dump of a gigantic bunch of documents
2 and basically prevent anyone from seeing them.

3 Now in this case, the adverse litigant has
4 been afforded the opportunity to see them, I
5 appreciate, but the public has not. I think the
6 public has an interest. I think our rules are set up
7 so that the public should have an opportunity to hear
8 as much of possible of this. If the public doesn't
9 want to, fine. But they should be open. And while I
10 don't fault anyone here for what has been done, I just
11 think that the process itself could certainly use some
12 improvement.

13 And I hope that you all can find a way,
14 particularly since it's the NRC's creation of this
15 SUNSI categorization, that you can find some way to
16 slim down its use so that we can for the most part
17 open our proceedings to the public, because I think
18 that's the way that they were designed.

19 With that, we will adjourn. And again, it
20 was a pleasure being in this hearing with all of you
21 today. Thank you.

22 (Whereupon, the hearing was adjourned at
23 4:28 p.m.)

