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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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ATOMIC SAFETY AND LICENSING BOARD PANEL

ORAL ARGUMENTS ON CONTENTIONS

* * * * *

IN THE MATTER OF: Docket No. 50-293-LR
ENTERGY NUCLEAR GENERATION ASLBP No. 06-848-02-LR
COMPANY AND ENTERGY
NUCLEAR OPERATIONS, INC.

(PILGRIM NUCLEAR POWER
STATION)

Friday, July 7, 2006

The above-entitled matter came on for hearing, in the Ballroom of the Radisson Hotel Plymouth Harbor, 180 Water Street, Plymouth Massachusetts, pursuant to notice, at 9:00 a.m., Ann M. Young, Chair, presiding.

BEFORE:

ANN M. YOUNG Chairman
RICHARD F. COLE Administrative Judge
NICHOLAS G. TRIKOUROS Administrative Judge

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

9:00 p.m.

1
2
3 CHAIR YOUNG: On the record. We were
4 going to start today with Ms. Bartlett discussing your
5 argument on SAMAs and I was just trying to refresh my
6 memory. In the Massachusetts AG's contention, did you
7 -- It seems as though you discussed SAMAs.

8 MS. CURRAN: Yes, we did.

9 CHAIR YOUNG: Okay. I just want to make
10 sure I didn't remember that wrong. And basically,
11 your argument is that the Turkey Point Licensing Board
12 and the Commission distinguished SAMAs and suggested
13 that one of the reasons that Mr. Unkovaj's (PH)
14 contention was not admissible was because it did not
15 raise the issues of SAMAs. Correct?

16 MS. BARTLETT: That's right.

17 CHAIR YOUNG: Okay.

18 MS. BARTLETT: I don't think either the
19 regulations or this Turkey Point, the two Turkey Point
20 decisions that Entergy and the NRC staff are relying
21 on categorically rule out spent fuel SAMAs from
22 consideration. I've quoted the parts of the decisions
23 in my reply to them, but I have them here as well.

24 CHAIR YOUNG: Want to go next to the staff
25 or Mr. Lewis, do you want to go first?

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1 MR. LEWIS: Judge, I do think we've
2 addressed this issue adequately in our answer. I
3 really don't have anything to add to it. We've cited
4 the GEIS and the Turkey Point decision and the rules
5 and --

6 CHAIR YOUNG: Turkey Point, the Commission
7 itself does distinguish SAMAs. On page 21, the part
8 that's quoted in Pilgrim Watch's (PH) reply, they do
9 point out that the Commission says "Part 51 does
10 provide that alternatives to mitigate severe accidents
11 must be considered for all plants that have not
12 considered such alternatives. But Mr. Unkovaj's
13 contention two says nothing about mitigation
14 alternatives.

15 MR. LEWIS: What the Commission also says
16 is that severe accident mitigation alternatives
17 applies to nuclear reactor accidents, not spent fuel
18 storage accidents. That's explicit. So SAMAs refers
19 to reactor accidents, not spent fuel storage
20 accidents. That's the dispositive point.

21 CHAIR YOUNG: I guess you have an argument
22 about which sentence has more, carries more, weight.
23 Do you have anything to add, Ms. Uttal?

24 MS. UTTAL: Judge, I think that Turkey
25 Point couldn't be clearer. What we quoted at page 21,

1 22 is what the Commission said regarding SAMAs and
2 spent fuel pools. I can read it, but it's in my
3 brief. What they said about Mr. Unkovaj's contention
4 is basically he didn't ask for it, but even if he had,
5 it wouldn't have been admissible because of the fact
6 that severe accidents go to reactor accidents and not
7 spend fuel accidents and they're inadmissible in a
8 proceeding regarding license renewal.

9 CHAIR YOUNG: Both the Board and the
10 Commission nonetheless did seem to distinguish that
11 and I think that one probably must presume that it
12 means something. I mean obviously we could just say
13 it's dicta, but I did go back and read those.
14 Anything more on this issue? Do you want to add
15 anything, Ms. Curran?

16 MS. CURRAN: No.

17 CHAIR YOUNG: All right. If there's
18 nothing more on the Massachusetts contention and
19 Pilgrim Watch's contention four, let's go back to
20 contention one.

21 MS. UTTAL: Judge, I wanted to say one
22 thing about the staff's affidavit in the Sharon Harris
23 case in terms of why it's not in ADAMS anymore. It
24 was pulled after 9/11 and hasn't been put back. So I
25 would let the Board, you know, caution the Board that

1 it shouldn't be put back in ADAMS.

2 CHAIR YOUNG: Are you saying that what Ms.
3 Curran has offered to give to us is --

4 MS. UTTAL: It was -- It's not in. It was
5 specifically pulled from ADAMS after 9/11 when the
6 Commission was doing their review of what was in ADAMS
7 and it hasn't been --

8 JUDGE COLE: -- spot information or
9 something.

10 MS. UTTAL: Information that they don't
11 want generally disseminated I guess. It's the SISP
12 review and it hasn't been put back into ADAMS.

13 CHAIR YOUNG: Are you suggesting that this
14 be submitted under seal or --

15 MS. UTTAL: Probably the best way to do
16 it. I don't know the status of how we have to handle
17 these SISP documents when they haven't passed muster,
18 but all I know is it was one of the documents that was
19 not returned to ADAMS.

20 CHAIR YOUNG: You have worked with Ms.
21 Curran before on how to handle sensitive documents.
22 So why don't the two of you get together and work out
23 how to do that and I'm going to assume that you can do
24 that by agreement in consultation with the security
25 people and then make sure that when it is submitted if

1 it is submitted that you inform all the other
2 participants of what procedures to follow so that they
3 can do that as well. If it's not safeguards, I'm not
4 sure whether we're going to have to go through all the
5 --

6 MS. UTTAL: I don't -- It's probably not
7 the same amount of hoops. I just don't know how -- I
8 know it was out there at one point and that Ms. Curran
9 has a copy and there are other people that have copies
10 just as how the agency should handle it since it has
11 been removed from ADAMS.

12 CHAIR YOUNG: Another thing you might do
13 is agree on which parts need to be redacted or
14 something like that unless any of those parts are the
15 parts that you really want us to look at.

16 MS. CURRAN: Judge Young, I just wanted to
17 let you know. I am going to be in the office on
18 Monday and then I'm going to be out until the 18th.
19 What I was planning to do on Monday was make copies of
20 the relevant documents and send them to you and I was
21 going to ask Mr. Lewis and Ms. Uttal if they wanted me
22 to send them copies. I'd just like to suggest that I
23 get these things in your hand because otherwise it's
24 going to be over a week before I get them to you and
25 the purpose is so that you can look at these things

1 and make a decision and then you know maybe we can
2 give you some guidance afterwards as to what -- It's
3 a question of what you do with it whether you put a
4 note to the -- When you send something to the public
5 document run, put a note on it saying that I've been
6 alerted that this was formerly removed from the PDR.

7 CHAIR YOUNG: The only thing is I don't --
8 I mean I wouldn't normally want to get something from
9 a party unless all of the other participants were sent
10 copies. So one way to do it if you're not going to be
11 available is get a copy to Ms. Uttal and have her work
12 out with the staff security people how to handle it
13 and then get it to us and the other participants as
14 quickly as possible along with suggestions from the
15 security people as to --

16 MS. UTTAL: I have my own copy of the
17 affidavit -

18 CHAIR YOUNG: Okay. Maybe you can just do
19 that on your own without --

20 MS. CURRAN: There was the Aaron report
21 and the Perry affidavit. So those are the two things
22 and --

23 MS. CURRAN: I don't know if the Aaron
24 report in ADAMS. I imagine it's not.

25 MS. UTTAL: And you don't have that?

1 MS. CURRAN: I probably don't have that
2 anymore. So you'll have to send that to me. I won't
3 be in Monday, but I'll be in the rest of the week.

4 MS. UTTAL: Okay. All right. Sounds like
5 it's solved.

6 CHAIR YOUNG: For the background of this
7 problem, Ms. Hollis and Ms. Bartlett and Ms. Lambert,
8 you may already know this, but in some of our
9 proceedings we deal with sensitive information.
10 Usually, it's safeguards, NRC specific category of
11 information relating to security at nuclear power
12 plants and sometimes classified, but this is
13 apparently not either of those. But it has some
14 sensitivity about it.

15 With safeguards and classified, there are
16 specific procedures and measures that have to be taken
17 in order to protect this information including things
18 like safes and so forth. Hopefully, we won't have to
19 get into too cumbersome a process.

20 MS. UTTAL: I don't think so. I don't
21 keep it in a safe. Nobody's told I have had to.

22 CHAIR YOUNG: Okay. Let's us know what
23 the security people want to have happen and if there's
24 any problem with that, any party can, of course,
25 challenge that. Then when you've done that, send

1 everything out to all of us with whatever instructions
2 unless you think there's going to be a dispute in
3 which case we can always have a conference call to
4 talk about it.

5 MS. UTTAL: Whatever they tell me, I hope
6 it's the least onerous.

7 CHAIR YOUNG: If it does turn out to
8 involve some of the measures that we took in the
9 Catawba case which involved safes and having the
10 security people come out and check your offices and so
11 forth, that might be a little --

12 MS. UTTAL: I can't imagine that that will
13 be it. I think it will be more like keeping it off of
14 ADAMS and not maybe replicating it too much. But I
15 don't know. I'm just taking a guess here.

16 CHAIR YOUNG: Okay. That sounds like it
17 can be worked out. Ms. Bartlett, do you want to give
18 us a brief summary of where we are at this point in
19 the issues on contention one.

20 MS. BARTLETT: Sure. Basically, Pilgrim
21 Watch in response to events that have been happening
22 around the country that we have been made aware of
23 examined Pilgrim's aging management plan to assure
24 ourselves that they were complying with 10 CFR 54.21
25 which says that they have to demonstrate that the

1 effects of aging will be adequately managed so the
2 intent functions will be maintained for the period of
3 extended operation, in particular, with respect to
4 buried components such as pipes and tanks. There have
5 been several incidents around the country as I'm sure
6 you are aware of leaks in these pipes that go
7 undiscovered for numbers of years and actually result
8 in quite massive amounts of radioactively contaminated
9 water leaching into groundwater.

10 So we examined Applicant's aging
11 management plan and discovered that the plan provides
12 basically for inspections every ten years of these
13 buried components and we contend that that's an
14 inadequate way of managing for aging. There are
15 tending monitoring wells in place to detect leaks if
16 they were to occur. The flow of water would likely
17 bring contamination right into Cape Cod Bay before
18 it's discovered and we think the prudent approach
19 would be to either have more effective, more frequent
20 inspections and/or monitoring wells to ensure that
21 those inspections are adequate.

22 CHAIR YOUNG: Does the aging management
23 part of the application include any monitoring aspect
24 of it because normally that would be an operational
25 kind of thing, but you're arguing that it should be

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1 included in the aging management as an alternative or
2 supplement to this.

3 MS. BARTLETT: Right. We're not talking
4 about monitoring in terms of the environmental
5 monitoring that's required operationally. We're
6 talking about monitoring as a way to ensure that the
7 aging management is adequate. It's an old plant.
8 These pipes corrode. We've submitted a report that
9 shows these pipes most likely corrode even faster when
10 they have this radioactive water circulating and that
11 particularly if it's so difficult to regularly inspect
12 these buried components, that monitoring wells would
13 be a good addition.

14 CHAIR YOUNG: Anything further before we
15 go on to the staff and Entergy?

16 JUDGE COLE: You had also released a
17 question regarding the method that would be used every
18 ten years to do the inspect. Did you want to say
19 something about that?

20 MS. BARTLETT: The method basically I
21 believe they either dig up the pipes to inspect them
22 or in the course of replacing things routinely, they
23 inspect them or they refer to an ultrasonic testing
24 array. That was quite vague. We don't have an expert
25 hired at this point, but I have talked to people about

1 this ultrasonic testing and it's not at all clear that
2 that's a way for detecting small leaks and corrosion
3 underground. Again, I realize without having an
4 expert report, you just have to take my word for it.
5 But in particular, the every ten years part of it
6 bothered us because that means it will pretty much
7 only happen once during the course of the whole
8 extension period.

9 MS. LAMPERT: Nor is there any history to
10 go forward on that in the ultrasound testing.

11 MS. BARTLETT: Right. They had also said
12 in their application the ultrasonic testing is a
13 relatively new technique and they don't have operating
14 experience on that.

15 (Discussion off microphone.)

16 CHAIR YOUNG: Mr. Lewis.

17 MR. LEWIS: I think we've addressed this
18 issue well in our answer. The only thing I saw new in
19 the reply was the assertion that there were site-
20 specific attributes that make leaks and leak detection
21 more probable and --

22 JUDGE COLE: Less probable.

23 PARTICIPANT: Less probable.

24 MR. LEWIS: Made leaks.

25 JUDGE COLE: Leak detection.

1 MR. LEWIS: Sorry. Yes, they do. Made
2 leaks more probable and leak detection less probable
3 I think was the allegation, but whatever the
4 allegation was in the answer. Originally, Pilgrim
5 Watch had only referred to site-specific attributes
6 without identifying what they were and in their reply,
7 they said it's the geologic features. It's the fact
8 that it's near the coast and the groundwater flows
9 into the ocean.

10 I would just say that there's no
11 explanation how those geologic features make leaks
12 more likely is the groundwater is flowing into the
13 ocean. I don't know why a leak would be more likely
14 and as far as detection, I also don't understand why
15 that makes it harder to detect leaks except to the
16 extent that it's obviously if there ever were a leak
17 and there's no indication it is it wouldn't go off
18 site. It would go into the ocean and be vastly
19 diluted.

20 MS. BARTLETT: The ocean is off site I'd
21 submit.

22 MR. LEWIS: It leaked offsite to places
23 where there were residents as in a Braidwood situation
24 where you had a leak of tritium and it migrated
25 offsite to areas where there were homes and residents

1 and wells. In this case, it's going into the ocean
2 and I think the only thing that shows is it blinds the
3 existence of any significant safety issue.

4 JUDGE COLE: Mr. Lewis, are there any
5 monitoring or detection wells at the plant?

6 MR. LEWIS: I believe there's --

7 JUDGE COLE: Between the plant and the
8 ocean?

9 MR. LEWIS: No. I do need to add
10 something that is new and evolving since my answer.
11 We pointed out that some of the experience related to
12 the low level radioactive waste discharge line at
13 other plants and that wasn't within the scope in our
14 application. I was informed by the staff that in some
15 discussions with my client there is some indication
16 that they may add that in to scope. They tried to
17 confirm this, but that line may be added into the
18 scope of license renewal.

19 I do need to add, however, that Pilgrim
20 is a zero discharge plant. We don't discharge low
21 level liquid rad waste in our discharge line. It's
22 simply once the cooling saltwater comes in, it goes to
23 the condenser and goes out. So even if it is added
24 back into the scope for some other reason, that's not
25 a line that should be containing radioactive material.

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1 We don't discharge liquid rad waste.

2 JUDGE COLE: Unless there's a leak
3 somewhere in the system and it gets into the line.

4 MR. LEWIS: It's possible I guess, but
5 that's not it's purpose.

6 MS. BARTLETT: In at least one of the
7 other incidents it did involve an underground pipe
8 which was not meant to contain radioactive water. I
9 can't remember which one it was offhand.

10 MR. LEWIS: I believe the experience, one
11 was a discharge pipe that didn't routinely discharge
12 rad waste but did occasionally.

13 CHAIR YOUNG: One thing to mention at this
14 point is you mentioned there may be some information
15 forthcoming shortly and we got the document from you,
16 the RAI responses, last night and I believe there was
17 an amendment and I can't remember the date of that
18 that you mentioned in your reply and there was one
19 other thing that I'm not able to describe with any
20 specificity right now. But I believe there was one
21 other thing, development, since the original
22 application and possibly since the petitions.

23 In previous proceedings, we've set sort of
24 a -- I think we've set 30 days. It may be that 30
25 days have gone by with regard to the amendment. But

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1 if anything new does arise such that a new contention
2 would need to be filed on it, that would need to be
3 done on a timely basis under the late file contention
4 rules and apart from anything that may have already
5 passed that 30 days which we might look at that and
6 consider that the original 60 days would be a good
7 time period, I think in the past a 30 day period had
8 been used as sort of a reasonable time within which to
9 respond to anything. So let's just sort of establish
10 that as a approach to take at this point unless
11 there's any --

12 MS. CURRAN: Judge Young, that sounds fine
13 to us, very reasonable. I wanted to ask a question
14 really of Entergy. Do you plan to serve us with a
15 notice when you have any kind of RAI responses or
16 amendments to the application because I'm just
17 concerned. Sometimes we don't find out about it
18 because we don't know about it.

19 MR. LEWIS: No, I had not planned on
20 serving. There are lots of RAI responses, lots of
21 stuff going back and forth to the staff. It's on
22 ADAMS. I was trying, for example, this RAI response
23 that relates to SAMAs, it was obviously relevant to a
24 demitted contention and therefore I thought -- And it
25 was issued the day before yesterday. I wanted to get

1 it in people's hands so there wasn't any claim that it
2 was something that people should have known about and
3 they're surprised.

4 And the same thing with respect to this
5 change in scope, there are ongoing NRC questions and
6 reviews and audits and so this is something that was
7 evolving out of an NRC staff discussion with my
8 client. Again, I wanted to make sure since it bore on
9 what we said in our answer that everybody was aware of
10 it.

11 CHAIR YOUNG: Right.

12 MR. LEWIS: But all the other RAI
13 responses that have no relevance to the contentions,
14 NRC is willing to put people on their correspondence
15 list and many parties already are and they see the
16 RAIs and the responses are in ADAMS and it is -- There
17 are a lot of them. I'd rather not have to serve them
18 all if I don't have to.

19 MS. CURRAN: I wonder if you could just
20 serve us with the ones that are relevant to the
21 contentions. Would that be possible?

22 MR. LEWIS: I'll certainly try and do
23 that. Yes.

24 (Discussion in background.)

25 CHAIR YOUNG: It's in your interest to let

1 people know because obviously --

2 MR. LEWIS: It is. It's in my interest
3 very much if there's something relevant to the
4 contentions to let the parties know.

5 CHAIR YOUNG: Right. Because otherwise it
6 may take awhile to get things on ADAMS and then we
7 have to look at when did people have really access to
8 it and it would just save --

9 MR. LEWIS: I don't object to that. I was
10 just trying to -- You know every piece of paper that
11 flows back and forth that might --

12 MS. UTTAL: Judge, we can add them to --
13 At least for the RAIs, we can add Pilgrim Watch and
14 Ms. Curran.

15 MS. CURRAN: That would be great.

16 CHAIR YOUNG: Do you want to add Ms.
17 Hollis as well?

18 MS. UTTAL: And Ms. Hollis. We'll add the
19 attorneys to it.

20 MS. BARTLETT: Even just by email so we
21 don't get buried.

22 MS. UTTAL: I don't know if they send them
23 out by email. This is a staff function.

24 MS. BARTLETT: All right.

25 MS. UTTAL: So we'll just add you to the

1 distribution list.

2 CHAIR YOUNG: Ms. Hollis.

3 MS. HOLLIS: Your Honor, as a general
4 conversation, we find that the ADAMS system is --
5 Maybe we're not pushing the right buttons here, but
6 the ADAMS system tends to lag considerably.

7 CHAIR YOUNG: Right.

8 MS. HOLLIS: And it's a problem for us.
9 So any -- We'd like to be in the information flow
10 certainly with respect to anything that is being
11 traded back and forth information wise. So I would
12 appreciate that to ask counsel to assist.

13 JUDGE COLE: I think they are getting a
14 little better though.

15 MS. HOLLIS: It's getting better.

16 CHAIR YOUNG: It varies. Right.

17 MS. HOLLIS: It has it's good days and
18 it's bad.

19 CHAIR YOUNG: Right. So you'll put all of
20 them on yours.

21 MS. UTTAL: I'll put the services -- I'll
22 put the attorneys on the service list for RAIs and
23 things like that.

24 CHAIR YOUNG: And that will also indicate
25 whenever you've received anything.

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1 MS. UTTAL: We can't -- We don't send
2 anything out when we receive something. We're talking
3 about when we send out RAIs when we send out something
4 we'll put them on the list. We can't then when we get
5 something tell them we got something.

6 CHAIR YOUNG: Is there any way, Mr. Lewis,
7 that you could at least provide notice that there's
8 something out there, just do something like Ms. Uttal
9 is talking about? Create sort of a service list for
10 anything that goes out? There must be one central
11 person that you work with that --

12 (Microphone whistling.)

13 MR. LEWIS: I will explore that. The RAIs
14 don't come through me normally. It may be that there,
15 and there probably is, at the plant a distribution
16 list and let me just inquire if we can add the
17 participants.

18 (Microphone whistling.)

19 CHAIR YOUNG: Thank you.

20 MR. LEWIS: I'll inquire whether we can
21 add the participants to the distribution list. I
22 imagine we can.

23 CHAIR YOUNG: Okay. And also obviously
24 any other amendments that might be coming.

25 MR. LEWIS: Amendments I would -- Yes, let

1 me explore that. I will report back to the Board and
2 parties on what we can do.

3 CHAIR YOUNG: Okay.

4 MR. LEWIS: Unfortunately, I just don't
5 have a plant representative here who can tell me what
6 they do and how they do it.

7 CHAIR YOUNG: Okay. Anything you can do,
8 I think, would be helpful especially if it's anything
9 relevant to these contentions. We want to hear from
10 the parties soon because we're making every effort to
11 move our part in the process along. So all right.

12 JUDGE TRIKOUNOS: Just one question. Is
13 there anything generic coming out of the staff
14 regarding this issue of leaks from underground pipes?

15 MS. UTTAL: There's the task force and I
16 believe that their report is scheduled to come out in
17 maybe August.

18 JUDGE TRIKOUNOS: August. That's right.

19 CHAIR YOUNG: Early or late?

20 MS. UTTAL: I don't know the exact date.
21 There may be something on the website. They do have
22 information about task force on the website and that
23 may have the dates.

24 JUDGE TRIKOUNOS: What's the name of it?

25 MR. WEDEWER: The formal name, Your Honor,

1 it's Liquid Radiological Release Lesson Learned Task
2 Force. It's kind of a mouthful but their report is
3 due in August and I can't put a precise time on it.
4 But it's going to be, should be rather, a
5 comprehensive look at this whole issue.

6 JUDGE COLE: And what's the purpose of
7 this report?

8 MS. UTTAL: The task force is looking at
9 the issue of the leaks that have started with the
10 Braidwood situation.

11 JUDGE COLE: With the thought in mind?

12 MS. UTTAL: I think they're doing a survey
13 of the fleet.

14 JUDGE COLE: So it's identification of a
15 scope of a problem.

16 MS. UTTAL: I don't know the exact
17 parameters of what the task force is doing, but like
18 I said, there is a website and it may have the, it
19 probably has the Commission's charge to the task force
20 and what they're supposed to do and what their mission
21 is.

22 JUDGE COLE: May be possibly with
23 recommendations on how to correct some situations or
24 don't you know?

25 MS. UTTAL: I don't know exactly what.

1 JUDGE COLE: Yes.

2 MS. UTTAL: I can't say.

3 JUDGE COLE: That's okay.

4 CHAIR YOUNG: Okay. Well, everyone can be
5 following that on the website and then as soon as you
6 do get any information, if you could do the same thing
7 with that as the other that would be helpful. All
8 right. Anything more on contention 1? Ms. Hollis, I
9 didn't get to you yet.

10 MS. HOLLIS: Just one clarification
11 question, Your Honor, in the case of this study, the
12 task force report that will be released. If there are
13 issues which are put forth in that report which are
14 directly relevant to this case, to this relicensing
15 proceeding, will then those be taken into account in
16 the relicensing process as a general proposition going
17 forward? How do they get incorporated in this process
18 if there is something which is clearly a yellow
19 cautionary flag or the red flag that goes up on a case
20 that says that something has to be addressed? Is that
21 in the overall reactor oversight process or is that in
22 the relicensing?

23 CHAIR YOUNG: Probably the -- Why don't
24 you give the answer if you know to the extent that you
25 know?

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1 MS. UTTAL: Okay. If something comes out
2 of the task force that something has to be done by the
3 licensees, it will be under the operating reactor
4 oversight whether it's a regulation or a order or
5 something else.

6 CHAIR YOUNG: But since there is this
7 aging management part of the license renewal process
8 and there are several plants undergoing this, do you
9 think there's a possibility that that might be
10 addressed? I don't know that you would have any
11 knowledge of that but maybe some of your -

12 MS. UTTAL: Actually, I don't, but I wish
13 I knew everything the agency --

14 CHAIR YOUNG: I think one of the license
15 renewals. Some of the license renewal people are back
16 there. Maybe they would know.

17 (Discussion off microphone.)

18 MS. UTTAL: Well, it depends. So there is
19 no answer, but if it's something that comes out of
20 that that has to be done for safety sake, then it will
21 be done and everybody will have to come into
22 compliance with whatever it is whether they've been
23 renewed or not.

24 MS. BARTLETT: Judge Young, could I just
25 say that Pilgrim Watch considers this already within

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1 the scope of what's required on the aging management
2 plan and required under 10 CFR 54.21(a)(3). So
3 whether or not this task force comes up with
4 recommendations and whether or not those
5 recommendations are made part of the relicensing
6 process for future relicensing, we consider this part
7 of today's relicensing that has not been dealt with
8 adequately in the management plan.

9 MR. LEWIS: Judge, may I just because
10 we're going off on this tangent.

11 CHAIR YOUNG: Right.

12 MR. LEWIS: Our application addresses an
13 aging management program for buried pipes and
14 components that are within the scope of the rule and
15 that program consists of a number of elements, not
16 just ten year inspections but also protective coatings
17 and wraps as part of the program. Our main objection
18 to the contention was that there was no basis offered
19 to challenge the adequacy of those measures.

20 There was nothing offered to indicate that
21 the protective coatings and wraps that are on these
22 components within the scope are even adequate and
23 there was nothing offered at all to indicate why this
24 additional inspection would insufficient. There was
25 just a general reference to operating experience and

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1 the call for onsite monitoring. We really view that
2 as radiological monitoring and not aging management.

3 But in any event without some showing that
4 we're doing is inadequate and as far as I know, none
5 of the plants who have had these experiences were in
6 license renewal and had these aging management
7 programs. Unless there's something that shows that we
8 have some component that susceptible that's likely to
9 leak and that's not being adequately managed, we don't
10 think there's a basis for the contention.

11 CHAIR YOUNG: I guess that actually raises
12 a question in my mind that I had thought about before.
13 So thank you for jogging my memory on that. It's
14 certainly true that a contention needs to in some way
15 be specific to the plant at issue. But there are
16 these lessons learned task forces on various issues
17 that arise. So obviously, the NRC and the industry
18 does look at what happens at one or a number of plants
19 especially if it looks as though there may be some
20 trend and applies the lessons learned to recommend new
21 measures so that other plants can avoid the same kinds
22 of problems.

23 So it seems that the information about
24 what's been referred to as "these leaks" and the
25 extent of them that was sufficient to lead to the

1 creation of the task force would at least be relevant
2 to the question and then if I think what Pilgrim Watch
3 is saying is that they have sort of built a case if
4 you will by pointing out various different factors
5 including the information from the other plants and
6 some other site specific information to show enough to
7 meet the contention admissibility standards that
8 they've raised an issue on which there's a genuine
9 dispute. That's their argument. I may be over-
10 summarizing it, but did I --

11 MS. BARTLETT: Yes, I think that was a
12 good summary.

13 CHAIR YOUNG: Okay.

14 MR. LEWIS: And our response is simply
15 that if you're going to raise experience as a basis,
16 show that it has some relationship to the components
17 that are actually within the scope in this case. A
18 number of the incidents at other plants involved spent
19 fuel pools at PWRs where there was leakage through the
20 liner. Those are spent fuel pools that are low grade
21 where the bottom of the pool is dripped down concrete
22 that is adjacent to soil and if there's a leak, it
23 goes through concrete and into the soil and
24 potentially the groundwater. We have a boiling water
25 reactor where our spent fuel pool tops at the 117 foot

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1 level and I don't know what the bottom is, a 70 foot
2 level I guess, but there's not going to be water
3 leaking out of the spent fuel pool and going into the
4 ground.

5 CHAIR YOUNG: But you're not saying that
6 there's absolutely commonality between your
7 underground pipes and any of the underground leaks,
8 that there's not possibility that there's anything
9 that your underground pipes would have in common with
10 some of the problems.

11 MR. LEWIS: I'm actually saying I'm not
12 aware of any commonality.

13 CHAIR YOUNG: But I mean --

14 MR. LEWIS: I don't have enough facts
15 about what happened at other plants to say one way or
16 another, but let me give you an example. One of the
17 systems that is in scope is the condensate storage
18 tank. It's right next to the reactor building. It
19 has a number of lines that run a very short space from
20 the condensate storage tank to the reactor building.
21 I think two of the lines are stainless steel. They
22 support HPCI and RCIC. The third line is a carbon
23 steel line.

24 CHAIR YOUNG: HPSI and RCIC, do you want
25 to --

1 MR. LEWIS: High pressure safety injection
2 and reactor core isolation, RCIC.

3 PARTICIPANT: Reactor core isolation
4 cooling.

5 MR. LEWIS: Thank you. Excuse me for the
6 acronyms. The other one is a carbon steel line, but
7 it's coated and wrapped. So it has two means of
8 protection against corrosion. I don't know whether
9 any of the other examples involves a stainless steel
10 pipe and also I don't know if any of this experience
11 involves pipes that were coated and wrapped like this.
12 I just think they should provide some basis to say
13 "Look. Here's some real experience. This kind of
14 component actually leaked under these circumstances
15 and the plant had your kind of aging management
16 program and it didn't work."

17 CHAIR YOUNG: Well, let me just --

18 MR. LEWIS: That's entirely --

19 PARTICIPANT: Can I address this now?

20 CHAIR YOUNG: Well, let me just follow up
21 on what I said before though. One thing about
22 underground pipes and I've been involved in other
23 cases where underground pipes and alleged leaks and so
24 forth were at issue. One thing about those is that
25 they're underground and so that fact alone makes it

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1 difficult for anyone including their plant or their
2 lawyer to know exactly what's going on everywhere and
3 to be able to make those comparisons and I presume
4 that's one of the reasons why this task force was
5 formed to look into these things that are difficult to
6 ascertain and try to make some determinations about
7 what's happening and what to do about it.

8 So in one sense, it seems as though you're
9 maybe asking for something that might be unreasonable
10 under the circumstances and certainly in the context
11 of contention of admissibility standards which don't
12 require that a party prove its case. Do you want to
13 respond to that?

14 JUDGE TRIKOUNOS: Let me just say that --

15 CHAIR YOUNG: Because I know you're
16 representing your client and I expect to hear this
17 from you. But the major of your argument sometimes
18 seems to be that within a relatively short period of
19 time a petitioner should be able to do essentially
20 what a task force might take six months or longer to
21 do. So there is a level of reason we need to apply.

22 MR. LEWIS: I think the NRC is looking at
23 this issue and it will decide whether there is a need
24 for greater onsite radiological monitoring as an
25 operating program. If that is needed, the NRC will

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1 impose it. That is an example of an operational
2 program that is not within the scope of license
3 renewal. I mean those programs are in place because
4 there are in fact unknowns. They are not aging
5 management mechanisms. They are there because in fact
6 there might be a release. There might be an accident.
7 I think still --

8 CHAIR YOUNG: But I mean the answer to my
9 question before was it depends. It might include the
10 aging management issue.

11 MR. LEWIS: And let me say that as far as
12 having appropriate radiological monitoring is
13 something that Entergy doesn't disagree with. I think
14 it's perfectly appropriate and the NRC needs to look
15 at this issue and make sure are all the licensees
16 doing what they need to do to have good onsite
17 radiological monitoring and that's an ongoing
18 operational issue that in fact is being addressed.
19 That's the reason why these programs aren't within the
20 scope of license renewal because they are addressed on
21 the ongoing real time. There was some operating
22 experience. The NRC is reacting. They will adjust
23 these programs as needed. So my narrow response is
24 that's going to happen.

25 Now with respect to our particular

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1 components, you can't inspect every inch of every
2 buried pipe every second. So you design them to be in
3 the ground for a long time. You put these coatings
4 and wraps that -- I mean these components were put in
5 there to be there 40 years and you design them that
6 way and you're going to have an inspection to go in
7 the first ten years of license renewal and take a look
8 and say, "Are they still working? Are all these
9 features, these coatings and wraps, still working or
10 do I have a problem" and I think that's supplemented
11 by your onsite radiological monitoring which I do
12 believe we adjusted.

13 But I don't think that those programs
14 really are aging management mechanism, aging
15 management program. I think they are a broader
16 operational program that are put in place because,
17 yes, you do have uncertainties and it's important to
18 take them into account and we have defense-in-depth
19 and so we try and make sure things don't leak. But
20 then we have radiological monitoring not only onsite,
21 but offsite and a lot of other things.

22 CHAIR YOUNG: Right.

23 MR. LEWIS: We monitor for radioactivity
24 at different discharge points, too, even though we
25 don't expect it to be there. We have systems that

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1 don't have radioactivity, but if there was an
2 adjoining system and there was leak, there might be.
3 So we monitor to make sure that there isn't leakage
4 going into it. We do a lot of things that are very
5 proactive and preventive.

6 CHAIR YOUNG: Right. Clearly, that's
7 true.

8 MR. LEWIS: Those aren't aging management
9 systems. They're just good practice and good health
10 and safety.

11 CHAIR YOUNG: Go ahead.

12 JUDGE TRIKOUNOS: I just want to say that
13 as I read the contention I don't think it's trying to
14 say or could say that there's anything wrong with your
15 protective coatings or wrappings program. What the
16 contention is basically saying, how do you know if
17 there were in addition to have others know. The only
18 way you would know is with some radiological
19 monitoring or inspection, inspection frequencies every
20 ten years. The judgment of the Petitioners of the ten
21 years is to infrequent an inspection.

22 MR. LEWIS: That's one of the things that
23 we say you have no basis for that. You can say it's
24 not, but they may have had their own feeling it's not.
25 I submit that's not a basis.

1 MS. BARTLETT: Judge -- Go ahead.

2 JUDGE COLE: The plant has been operating
3 for how many years?

4 MR. LEWIS: About 30.

5 JUDGE COLE: Have you conducted these same
6 kinds of inspections during the first 30 years, the
7 life of the plant?

8 MR. LEWIS: I wish I had a plant person
9 here. I think that there have been opportunistic
10 inspections -

11 JUDGE COLE: Well, really my question is -
12 -

13 MR. LEWIS: -- not for this purpose.

14 JUDGE COLE: -- in your renewal you
15 indicate that you have to have a ten year inspection
16 plan. Is that new? Is that associated with the
17 renewal plan or have you been doing this since the
18 plant opened?

19 MR. LEWIS: No, this is not something
20 that's been done since the plant opened it. Also I
21 think the every ten years language is Pilgrim Watch's.
22 I think that --

23 PARTICIPANT: No.

24 PARTICIPANT: No.

25 (Discussion off microphone.)

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1 MR. LEWIS: Well, this is a new program.
2 No, we've not been doing every ten years since the
3 plant started. No.

4 JUDGE TRIKOUNOS: Okay. Thank you.

5 CHAIR YOUNG: Ms. Bartlett, you had
6 something.

7 MS. BARTLETT: Well, just in response to
8 Counsel kind of implying that we are going by our
9 intuition and on a fishing trip of some kind, I mean
10 I really think that the regulations put the burden on
11 the applicant. It says that the applicant has to
12 "demonstrate that the effects of aging will be
13 adequately managed for the period of extended
14 operation" and all we're saying and we don't have to
15 prove it at this point, we're saying there's a
16 deficiency in the management plan to deal with this
17 issue of underground leaks and we've brought forward
18 our concise statement of alleged facts which we were
19 required to do and not required to prove and I think
20 this is clearly an issue that's material and is in
21 dispute. So I feel that we've met our burden.

22 CHAIR YOUNG: Thank you. All right. If
23 there's nothing further on contention one.

24 MR. WEDEWER: Your Honor, just to add one
25 thing that might be of help. It's August 21st is when

1 that report is due.

2 CHAIR YOUNG: We're operating under a
3 guideline of we make every effort to follow the
4 Commission's guideline of getting a decision issued
5 within 40 days of the last pleading.

6 PARTICIPANT: Forty-five days.

7 CHAIR YOUNG: Didn't I say 45? Sorry.
8 Forty-five days which would be 45 days after July 3
9 which would be a little bit by a few days before
10 August 21 which it would be nice to have the benefit
11 of that obviously. In any event, if anything further
12 comes to light, please provide that information to us
13 and all the participants as soon as possible and we'll
14 be watching to see what comes out in any event.

15 All right. You had asked for --

16 MR. LEWIS: Judge, I'm sorry. The program
17 that we described, the -- position as every ten years
18 is Pilgrim Watch's. Our aging management program and
19 our application and what is identified as being
20 sufficient in the GALL Report which is the NRC's
21 generic aging lessons learned is a one-time inspection
22 within the first ten years of the period of extended
23 operation. So it's not every ten years. It's one
24 inspection in that first ten year interval. I just
25 wanted to make sure that everybody was aware of that.

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1 But every ten years was not our language.

2 CHAIR YOUNG: Okay.

3 MR. LEWIS: And it's obviously getting
4 picked up and I just wanted to make sure everybody was
5 aware that's not the case.

6 CHAIR YOUNG: Can you give us a citation
7 to that for what you just told me?

8 MS. BARTLETT: Appendix A.

9 CHAIR YOUNG: Page?

10 MS. BARTLETT: 2-1-2 I think.

11 MR. LEWIS: The GALL Report which is NUREG
12 1801 Rev 1 is in Section XI(M), Page 111, a
13 complicated number. Our buried pipe and tank
14 inspection program is described at pages B-17 and B-18
15 of the license renewal application and it says, "A
16 focused inspection will be performed within the first
17 ten years of the period of extended operation unless
18 an opportunistic inspection or an inspection via a
19 method that allows assessment of the pipe condition
20 without excavation occurs within this ten year
21 period." That is the commitment.

22 CHAIR YOUNG: Okay. Ms. Uttal, you'd
23 asked for a break at 10:30 a.m., but it might be good
24 to take the break now and then come back and discuss
25 contention two. All right. How much time?

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1 MS. UTTAL: Fifteen.

2 CHAIR YOUNG: Fifteen minutes. Okay.
3 10:05 a.m. we'll start back. Off the record.

4 (Whereupon, the foregoing matter went off
5 the record at 9:49 a.m. and went back on the record at
6 10:05 a.m.)

7 CHAIR YOUNG: On the record. Let's get
8 started. Did you have a question? You wanted to ask
9 a question before we went onto --

10 JUDGE TRIKOUNOS: Earlier, Mr. Lewis, you
11 had said that you, you had made some reference to
12 discussions with the NRC regarding ongoing licensing
13 with respect to this leakage issue. I thought you
14 said something about radiological monitoring
15 discussions. Did I misinterpret that?

16 MR. LEWIS: What I was referring to was
17 that there were changes to the scope of the equipment
18 that was within the scope of license renewal because
19 of ongoing RAIs and site audits. There are a number
20 of site audits the NRC does on license renewal to look
21 at your scoping and screening process and your aging
22 management programs and they ask questions during
23 those reviews, you know, why is this in scope, why
24 isn't this.

25 And what I heard today is that in

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1 connection with that dialogue that we are putting in
2 the main discharge line into the scope. I haven't
3 confirmed that yet. This doesn't have to do with --
4 Monitoring has to do with what's within the scope of
5 your license renewal.

6 JUDGE TRIKOUNOS: All right. Thank you.

7 CHAIR YOUNG: All right. Yes.

8 MS. HOLLIS: Does that mean that that
9 relates to aging management issues versus radiological
10 monitoring?

11 CHAIR YOUNG: Go ahead.

12 MR. LEWIS: This is the main line that you
13 have, what's the cooling and this is the circulating
14 water and that comes in, goes through the condenser
15 and goes back out. It is not a line that discharges
16 radioactivity. We don't discharge liquid rad waste
17 through that line.

18 (Discussion off microphone.)

19 MR. LEWIS: We may monitor it anyway. I
20 know for example the saltwater discharge system is one
21 of these systems where saltwater flows in, goes
22 through heat condensers and flows back out again.
23 It's not meant to contain radioactivity. It adjoins
24 with on the other side of the condenser. On the other
25 side of the heat exchangers is radioactive liquid and

1 therefore if there was a leak there could be
2 contamination. We monitor the discharge point to see
3 if there is any contamination in that system. I don't
4 know whether we do that -

5 I wasn't prepared to talk about the main
6 discharge line. This wasn't in scope. I imagine if
7 we do it on the saltwater circulating system that we
8 do it on the main discharge system. I suspect we do,
9 but I'm not sure. I can probably try to find out if
10 you'd like to know.

11 CHAIR YOUNG: When you get RAIs asking
12 about what you have, I guess, it's what you consider
13 to be in scope, I guess the nature of the discussions
14 it sounds to me like is that the staff is asking why
15 you have included or have not included this or that
16 within the scope of your aging management program and
17 so there may be discussions about whether particular
18 things in your view and/or in the staff's view should
19 be within the scope of license renewal more generally
20 and within the scope of your application more
21 specifically. Am I understanding that correctly?

22 MR. LEWIS: Yes, except that -- Well,
23 first of all, my information on this change in scope
24 is anecdotal at this point and I apologize. I heard
25 it and so I wanted to make sure I told them before

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1 they left. But I'm not sure if this is an RAI. I
2 don't know if this is written question. There are
3 site audits where NRC teams come and look at what we
4 did for license renewal and they go through the
5 application. They go through the supporting
6 documents. They ask questions verbally and maybe the
7 staff has a better answer than I do on how this change
8 has occurred.

9 MR. WEDEWER: Yeah. I might be able to
10 help out, Your Honor. This isn't --

11 CHAIR YOUNG: Why don't you identify
12 yourself for the record again.

13 MR. WEDEWER: I'm sorry. Sure. I'm Harry
14 Wedewer.

15 CHAIR YOUNG: Okay. Thank you.

16 MR. WEDEWER: I'm obviously from the NRC
17 staff. Anyway, this in my information is also, having
18 come down literally just last night, but this hasn't
19 even made it up to the level of an RAI yet. This was
20 the outcome of an audit and that the staff after
21 reviewing the latest audit decided that this pipe
22 needed to be in scope after all.

23 CHAIR YOUNG: Within the scope of this
24 license renewal.

25 MR. WEDEWER: I believe that's correct.

1 CHAIR YOUNG: Because the staff considers
2 that it's in the scope of license renewal generally.

3 MR. WEDEWER: It -- No, not generally,
4 Your Honor. In this case, my information is that
5 ordinarily this pipe would have not been in the scope
6 of license renewal. But in this particular instance,
7 failure of it could impact a safety system, safety
8 related system. So under its 50.54(a)(2), it was
9 considered to be in scope for the purposes of this
10 license renewal.

11 MR. LEWIS: That probably means that it's
12 not in scope in order to prevent any leak of
13 radioactivity. It probably means it's in scope to
14 prevent an interruption of the flow. Again, because
15 it's anecdotal, I'm not sure why it's in scope. It's
16 not a safety related system. The (A)(2) criterion is
17 a non-safety related system which if it fails might
18 prevent a safety related system from performing its
19 function and at this point, I don't know what the
20 relationship is.

21 MR. WEDEWER: Yeah, and that's what it is
22 because of that impact.

23 CHAIR YOUNG: I guess one thing I'm not
24 quite following is why it would be for one plant and
25 not for other plants at least of the same type.

1 MR. WEDEWER: That, Your Honor, I just
2 don't know at this point, but my information was that
3 it just was, that ordinarily this would not be in
4 scope. But for this plant, it was at this time. I
5 can't show you more technical detail on it than that.

6 JUDGE TRIKOUNOS: Again, I'm not familiar
7 with the exact component or product you're talking
8 about, but in general terms, that heat exchange you're
9 referring to, the other side of it, the reactor side
10 is at negative pressure. If there were a crack in the
11 tube or a leak in the tube, the flow would be from the
12 environment to the plant which would result in
13 saltwater intrusion. Big problems for the plant, but
14 not the environment.

15 CHAIR YOUNG: Go ahead.

16 MS. HOLLIS: Your Honor, just trying to
17 nail down if the inclusion of this particular pipe in
18 the scope of the relicensing is as a result of
19 concerns about aging management of the pipe and
20 therefore, would tie in with a whole series of other
21 issues, that's all I was trying to get to, and I still
22 don't quite, it's not coming through to me very
23 clearly as to whether it's an aging management issue
24 or not.

25 CHAIR YOUNG: I guess I'm assuming that it

1 would have to be in order for the staff to consider it
2 to be in scope and I'm seeing you nodding.

3 MR. WEDEWER: Yes, I believe.

4 CHAIR YOUNG: And that's why I don't
5 understand why it would be at one plant and not at
6 another but --

7 MR. WEDEWER: Your Honor, I just cannot --
8 I just don't have the technical detail of this
9 configuration versus other configurations to tell you
10 why that's true.

11 MR. LEWIS: The question is what is the
12 function that they're trying to protect too.

13 MR. WEDEWER: Yes.

14 CHAIR YOUNG: Whether it falls within the
15 safety functions in the rule.

16 MR. LEWIS: You know, they may have
17 decided to add this in scope because they want to
18 maintain a function. That function may not be
19 preventing leakage of radioactivity. I don't think
20 this is credited for that purpose. So they may be
21 including it in the scope to make sure it can perform
22 some other function. Again, we really need to see
23 what is the change and perhaps I should commit to
24 inform the Board and the parties very promptly
25 afterwards once I get the facts because I don't have

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1 them.

2 CHAIR YOUNG: Yes, actually I think that
3 would be a good idea and it brings me to something I
4 was going to say about the next contention and that is
5 the amendment that you've submitted. I don't know.
6 Sometimes when amendments are submitted or responses
7 to RAIs, we'll get a motion to dismiss a contention
8 because it's moot. Usually, that's after they've been
9 admitted as I recall, but if there's going to be any
10 further filings in this case as a result of any of
11 these things or if any of the new information, you're
12 going to submit that to us and we've discussed some
13 other things that are going to be submitted, the
14 testimony from the Sharon Harris case and I can't
15 recall all the others.

16 But it might be a good idea if any of the
17 parties have any intention of filing anything further
18 as a result of these or any additional things, I
19 appreciate your bringing all these to our attention as
20 you're aware of them. But it might be a good idea
21 while we're here to see whether there's any intention
22 for anything further to be filed that would have any
23 effect on the rulings we need to make. I guess I
24 could start by asking do you intend to file anything
25 as a result of your amendment with regard to

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1 contention two.

2 MR. LEWIS: Well, our amendment predated
3 the contentions. There was a proposed interim staff
4 guidance document that came out on May 9th. We did
5 our very best to get responsive information in. We
6 got it in on May 11th.

7 CHAIR YOUNG: I don't think the
8 Petitioners knew about that though before they
9 submitted contentions from what I understand them to
10 be saying.

11 MR. LEWIS: They may not have. I mean we
12 did everything we could. We filed as promptly as two
13 days after the proposed ISG was issued. In fact, we
14 asked the staff to make sure it got in ADAMS right
15 away. We didn't send it to Petitioners because there
16 weren't any petitioners. I mean no one was identified
17 as a party yet. So all we could do is put in the
18 responsive information and try and make sure that it
19 got in ADAMS and I can't tell what date it got in
20 ADAMS either. We did our darnedest to make that
21 because this was an emerging issue that we got this
22 information on the docket as soon as possible and
23 there wasn't any attempt to exclude any petitioners.
24 They just didn't exist I mean.

25 CHAIR YOUNG: Right. No, I'm not

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1 suggesting. I'm just saying that let's see -- I
2 wouldn't want to get back to the office and then next
3 week have something filed that would change anything
4 if anyone had any indication that something was going
5 to be coming of that nature.

6 MR. LEWIS: Yes, it's not my intent.

7 CHAIR YOUNG: And I guess I'm talking to
8 the Petitioners, too, whether we're expecting any
9 further from you.

10 MS. CURRAN: Judge, we had said yesterday
11 that as a precautionary measure we're planning to file
12 a petition for rule-making with the Commission on our
13 contention, but we're going to -- We don't think that
14 should hold up the licensing board from ruling.

15 CHAIR YOUNG: Right. That wouldn't.

16 MS. CURRAN: I just wanted to mention
17 that.

18 CHAIR YOUNG: What about you and
19 particularly I guess in relation to this amendment?

20 MS. BARTLETT: Well, are we discussing
21 contention two now?

22 CHAIR YOUNG: Well, before we get into the
23 argument on it.

24 MS. BARTLETT: Okay. I think our position
25 is that the amendment does not necessarily change what

1 we are bringing forward.

2 CHAIR YOUNG: The reason I raised it is
3 because sometimes petitioners, especially new
4 petitioners who haven't been involved in the process
5 before, are not aware of the process of filing
6 amendments and then there'll be a motion that the
7 amendment sort of moots out the contention and then
8 there is a category of contentions that's been
9 developed in some of the case law called contentions
10 of omission and then what that obligates you to do is
11 if the Board were to agree that the amendment or the
12 new information moots out the contention then that
13 would obligate you to file a new contention on the new
14 information whatever form it came in in. That's why
15 I mentioned the 30 day deadline earlier this morning
16 and on this one, I think I said since we had not set
17 that 30 day deadline probably the original 60 days
18 would run. And I'm mentioning that now because I
19 don't know when it got into ADAMS, but if it was
20 shortly after May 11th, then your deadline would be
21 coming up fairly soon.

22 MS. BARTLETT: Right.

23 MR. WEDEWER: It was May 26th.

24 MS. BARTLETT: Exactly.

25 CHAIR YOUNG: May 26th.

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1 MS. BARTLETT: Which was the day after we
2 submitted our petition.

3 CHAIR YOUNG: So if there's something
4 further to be coming on that.

5 MS. BARTLETT: Right. Would we -- We'd
6 have an opportunity to reply if they submitted a
7 motion.

8 CHAIR YOUNG: Oh sure.

9 MS. BARTLETT: Okay.

10 CHAIR YOUNG: And I don't know whether
11 they are or not.

12 MS. BARTLETT: Right.

13 CHAIR YOUNG: But that you could -- I mean
14 if you were going to file something in any event, you
15 need to be aware of these time lines and the general
16 practice with regard to these kinds of things. Okay.
17 Was that all on one then? Then we've -

18 PARTICIPANT: Yes, for that part of it.

19 CHAIR YOUNG: For that part of it. Okay.
20 So then we can move into two and do you want to just
21 give a quick summary of where you see us being on two
22 now?

23 MS. BARTLETT: Sure.

24 CHAIR YOUNG: Based on having received the
25 responses and filed your replies.

1 MS. BARTLETT: Right. Okay. In our
2 contention two in our petition, Pilgrim Watch
3 demonstrated that the issue was material because it
4 concerns a deficiency in the aging management plan
5 that could impact public health and safety. It's a
6 safety -- The drywell is a safety related containment
7 component that needs to be maintained as a pressure
8 boundary and for structural support.

9 In the course of our preparing our
10 contention, the NRC staff proposed guidance on this
11 issue, in particular, for license renewals which is
12 what we're in now and it states, "Specifically the
13 staff has determined applicants for license renewal
14 for a plant with boiling water reactor Mark I steel
15 containment should provide a plant specific aging
16 management plan to address the potential loss of
17 material due to corrosion in the inaccessible areas of
18 the Mark I steel containment drywell shell for the
19 period of extended operation." It also included
20 instructions to develop a corrosion rate for the
21 inaccessible areas.

22 In their amendment to the application
23 filed by Entergy which again went on ADAMS the day
24 after we submitted our petition, the history of the
25 measurements that have been taken in this area was

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1 described. For the inaccessible areas of the sand
2 cushion region which I believe this is the main area
3 that's kind of in dispute, how well the measurements
4 have been done and what needs to be done in the
5 future, the Applicant states that it has discontinued
6 measurements of the drywell in the embedded regions.

7 And while the amendment details some
8 history of corrosion measurements, it appears that
9 measurements have been taken only twice in the
10 inaccessible embedded areas and that these
11 measurements as I said have been discontinued. It
12 also does not contain any commitments to incorporate
13 plant specific procedures for these inaccessible areas
14 into its aging management plan for the period of
15 extended operation as was requested in the proposed
16 staff guidance. Petitioners request that the
17 recommendations in the proposed staff guidance on this
18 issue should be immediately incorporated into
19 Pilgrim's aging management plan before the license
20 extension is approved.

21 So we on our read of that amendment that
22 was submitted that seemed to be sort of a description
23 of what has been done on the past. It did not give
24 any commitments to do as was recommended in the staff
25 guidance which was, where are the words, "provide a

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1 plant specific aging management plan to address the
2 potential loss of material in these areas." So I
3 guess we stand by what we have in our petition even
4 after reading the amendments submitted by Entergy.

5 CHAIR YOUNG: The staff does make the
6 argument that one of your basis 2.3.4, can no longer
7 seen to present genuine issues, genuine questions, of
8 law or fact as a result of the amendment because the
9 amendment demonstrates that there has been some
10 monitoring for corrosion.

11 MS. BARTLETT: I guess the corrosion
12 measurements that have been done in the past were done
13 in 2000 or 2001 I believe and that was in response to
14 some sort of, I'm not quite familiar with it, but some
15 sort of guidance letter in 1987. I still don't think
16 this conforms with the current concerns that the staff
17 guidance addresses for license renewals for the next
18 20 years.

19 CHAIR YOUNG: So we'll go to Mr. Lewis
20 next.

21 MR. LEWIS: The only support for the
22 contention that the Petitioners offered in the first
23 instance was the proposed ISG and our amendment
24 specifically addressed the recommendations in the
25 proposed ISG and we believed it did everything that

1 that proposed ISG indicated that we should do and our
2 letter is an amendment to the application. That is
3 our description of our aging management plan, our
4 plant specific aging management plan with respect to
5 the allegation that we're not addressing how we manage
6 aging in the inaccessible areas and these are areas
7 that are embedded in concrete normally. So the only
8 way you normally get at them is to chip away the
9 concrete and expose it and that's not a procedure that
10 you want to do very often particularly in a high
11 radiation area.

12 The ISG does not say that you have to do
13 UT measurements there periodically or periodic
14 inspections. It says use existing data, existing
15 measurements to come up with a corrosion rate and show
16 that that corrosion rate won't result in a fitting
17 below the acceptance criteria during the period of
18 extended operation.

19 Our amendment describes the data that we
20 have. It's data from '87. It's three years, '87,
21 2001 and I think the other one is 1999, but it's three
22 sets of measurements. The '87 data was the one that
23 was responsive to the generic letter. That was 12
24 measurements, that's in our amendment one, 12
25 measurements around the sand bed region of the

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1 drywell. So we have more than one or two data points.

2 All of those measurements showed as
3 described in this amendment of the application, no
4 corrosion. So if you take those data and you start
5 with as-built conditions and you look at '87, I think
6 it's '99 and it's 2000 and 2001, you'd have a zero
7 corrosion rate. Based on that and the proposed staff
8 guidance, we don't need to do further inspections. So
9 we have done exactly what the ISG indicates we should
10 do and there is nothing that the Petitioners have
11 provided that indicate a need for further management
12 measures.

13 CHAIR YOUNG: Did you want to ask
14 anything?

15 JUDGE TRIKOUNOS: Yes.

16 CHAIR YOUNG: Okay.

17 JUDGE TRIKOUNOS: I have a question
18 regarding the amendment. The amendment indicates
19 that, I'll quote it on page three of six, "Based on
20 the following four factors, P&P has removed UT
21 thickness measurements in the same (Inaudible) region
22 from the IWE program after the 2001 outage." And then
23 they mention four factors which includes "satisfactory
24 results from monitoring for leakage in the sand bed,
25 air gas," etc. I won't read them all.

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1 You then go on to discuss all the things
2 you're going to do to identify that corrosion may be
3 beginning and things you're doing to prevent
4 corrosion. The one thing that I'm missing from this
5 is let's assume that these things you're doing to
6 identify potential corrosion occur, so the leakage and
7 drains during an outage, etc. I don't see any
8 iteration back. Is there an implication then that you
9 go back to reinstating the UT thickness measurements
10 in the same sand bed region?

11 MR. LEWIS: There could be. I think there
12 is. It depends on where the corrosion is. Let me
13 first say that there's three sets of drains. There is
14 a drainious (sic) system up near the bellows, the
15 fueling bellows. There's a trough and if there's
16 leakage from the refueling bellows it goes in the
17 trough and it's an alarm system. So you know if
18 there's leakage there. Above the sand bed region in
19 the accessible area, there's a drain on the exterior
20 of the drywell and then the sand itself has a, the
21 sand bed region itself is drained. So you have
22 multiple drains. That's one of the reasons why there
23 hasn't been corrosion.

24 If you do have corrosion, if you have
25 water in these areas where there's not meant to be,

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1 there is a corrective action requirement and that was
2 part of the original assertion that our program
3 didn't. When you look at our license renewal
4 application, correction action is part of every one of
5 our aging management programs. It would require you
6 to do what is necessary.

7 But there is also an element of the ASME
8 Code that requires if you have areas where you suspect
9 corrosion you have to monitor for it. For example,
10 the augmented inspections, the element which we have
11 committed apply to areas where you suspect there may
12 be corrosion and if you have an area where you suspect
13 there is corrosion, you add this area into the
14 augmented inspections. They are done every outage.
15 They are the ones that you use UT measurements. I
16 would think if --

17 (Discussion off microphone.)

18 MR. LEWIS: I think under the ISG also if
19 you have leakage into the inaccessible area and you
20 implemented your corrective action program and you
21 looked at it and you found that you had had corrosion,
22 you would then trigger the requirements of this ISG to
23 come up with a corrosion rate. So I think you would
24 have to do further measurements, look at what the
25 corrosion rate is and show that you could project out

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1 to that period of extended operation before you could
2 eliminate the need to do further monitoring again.

3 JUDGE TRIKOUNOS: All right. That's what
4 I wanted to hear. So in other words what would happen
5 is that if you see a leakage in these various areas,
6 then that would invoke the requirement to go back and
7 say I do have the corrosion rate now and you would
8 have to develop what that corrosion rate is.

9 MR. LEWIS: If there were corrosion.

10 JUDGE TRIKOUNOS: Yes.

11 MR. LEWIS: Yes.

12 JUDGE TRIKOUNOS: I understand, but that
13 would prompt you then to take those actions.

14 MR. LEWIS: Correctly, yes.

15 JUDGE TRIKOUNOS: Okay. And it's also
16 covered by your corrective action program and it's
17 also covered under the ASME requirements.

18 MR. LEWIS: What I was saying is that
19 corrective action is an element of every aging
20 management program and if you have a situation where
21 you find that aging effect that is beyond what you
22 expected, you have to put it into your corrective
23 action program and address it responsibly. Here the
24 proposed ISG indicates what happens if you have
25 detectable corrosion in an inaccessible area and

1 explains this corrosion rate tracking method and what
2 I was saying is we don't have it in our corrective
3 action program generally this specific example.

4 But the fact that we're required to take
5 corrective action and the fact that we have this
6 proposed ISG presumably is finalized in this forum.
7 It could change but if this is the final version, the
8 fact that we're required to take corrective action
9 along with the commitments that we're making here
10 would require that course of action to look and see if
11 resulted in corrosion. If it did, determine the
12 corrosion rate and do an analysis to show that
13 corrosion would not result in the fitting below
14 acceptance criteria due to the period of extended
15 operation and have enough data to be able to make that
16 conclusion and disposition the issue in a way that
17 assures that the safety function would be performed.

18 JUDGE TRIKOUNOS: Including inaccessible.

19 MR. LEWIS: It works. Yes, this is an
20 (Inaudible) of the acceptable areas.

21 JUDGE TRIKOUNOS: Okay.

22 MR. LEWIS: Accessible areas are inspected
23 directly. If you have an area, an accessible area,
24 like the upper area of the drywell where you're having
25 corrosion or you see a corrosion mechanism, then you

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1 go into this augmented inspection method under the
2 ASME Code which involves UT when you can only look at
3 one side of the drywell shell.

4 JUDGE COLE: Just a question for
5 clarification. On page 22 of your response to
6 Pilgrim's Watch contention no. two, you talk about for
7 the examinations in 1999 and 2001 you chipped away
8 concrete at the periphery of the nine foot (PH)
9 elevation to allow for UT measurements.

10 MR. LEWIS: Yes.

11 JUDGE COLE: Was the area repaired after
12 you chipped away the concrete?

13 MR. LEWIS: Yes. Yes it was. It was
14 regouted.

15 JUDGE COLE: You tried to get it back the
16 same way it was before.

17 MR. LEWIS: Yes.

18 JUDGE COLE: Okay. I wonder if you were
19 creating more problems than you were solving.

20 MR. LEWIS: No, it was regouted. You
21 don't leave it exposed.

22 JUDGE COLE: Okay. Thank you.

23 CHAIR YOUNG: I'd like to just understand
24 something whether what you've been saying is
25 essentially -- Well, let me back up. Pilgrim Watch in

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1 response, in reply, to your response says that they,
2 even though you've taken some measurements that in
3 their view what you've done doesn't conform with the
4 proposed ISG and that they reiterate their request
5 that the recommendations in the ISG be incorporated
6 into your aging management plan. Do I understand you
7 to be saying that that has in effect been done?

8 MR. LEWIS: I think when you look at our
9 amendment one and your response and you compare it
10 against the proposed ISG you'll see that we've been
11 completely responsive. The proposed ISG in fact
12 contemplates that you only have one set of
13 measurements in the inaccessible areas. The proposed
14 ISG assumes that in response to the 1987 generic
15 letter you took measurements in '87.

16 As I said, we took measurements in three
17 different years. So we have more data than I expect
18 the typical company responding to this ISG will have.
19 And again, when you're looking at a flat line and
20 there's no corrosion, no corrosion, no corrosion, no
21 corrosion, I mean that's a pretty easy straight line
22 to fit.

23 CHAIR YOUNG: Okay. What I'm trying to
24 make sure I understand is that there's not anything
25 there that you haven't done. You mentioned something

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1 about it only be triggered in certain instances rather
2 than it being a sort of standing requirement. Is
3 there something that you're leaving out that you don't
4 see as being part of your responsibility under the
5 ISG?

6 MR. LEWIS: No, I'm not aware of anything
7 being left out in response to this ISG.

8 CHAIR YOUNG: Okay. So --

9 MR. LEWIS: I think we gave a fully
10 responsive amendment addressing all the elements of
11 the proposed ISG.

12 CHAIR YOUNG: Okay. Thank you. Staff?

13 MR. WEDEWER: Your Honor, our problem with
14 the, and I'm just going to summarize our response
15 rather than repeat all of our arguments, but our
16 problem with this contention two remains the same.
17 First, it lacks basis and then, second, for the reason
18 that you mentioned. It wasn't apparent to us at least
19 at the time we were looking at our pleading that there
20 was real dispute here given that amendment one was out
21 there.

22 To elaborate on the first about lacking
23 basis and I think this is even perhaps more evident
24 from Pilgrim Watch's reply to Entergy since they
25 didn't mention it in their reply to us is that they're

1 really relying on the ISG. It's really the basis here
2 because when you strip out the references to the ISG
3 what you're left with just to summarize is the
4 Hallsler (PH) testimony and the original pleading, the
5 UCS study which is nothing to say about this
6 particular component or region and then just really a
7 series of speculations, and so it's, which implicates
8 out of Calvert Cliffs, now the Oconee decision that we
9 cited is that I think what the Commission was looking
10 for, granted it's in RAI context, but what they're
11 looking for --

12 CHAIR YOUNG: I'm sorry.

13 MR. WEDEWER: I'm sorry. That was Oconee
14 and Calvert Cliffs which was in RAI context.

15 CHAIR YOUNG: RAI, okay.

16 MR. WEDEWER: I'm sorry. But anyway I
17 think that the analogy is that what the Commission was
18 saying there surely you can use RAIs and staff
19 interactions with the public and industry as a
20 jumping-off point was the language they used. But I
21 think what the Commission was saying too is that you
22 can't use it exclusively and that's what to us
23 appears to be what's really going on here. And that's
24 why we think those particular decisions were on point.

25 So what would be required for us to

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1 recommend to us that this contention come in is we
2 were going to have to read some things into it that
3 simply were not there. I would pass as well is that
4 we're obviously in receipt of amendment one and I
5 believe there's actually an amendment two out there
6 that has some --

7 CHAIR YOUNG: I'm not catching everything
8 you're saying.

9 MR. WEDEWER: I'm sorry.

10 CHAIR YOUNG: You're talking sort of fast
11 and maybe not close enough to the microphone. I also
12 want to make sure we get it on the record.

13 MR. WEDEWER: Yeah. Is that better, Your
14 Honor?

15 CHAIR YOUNG: Yes. Thank you.

16 MR. WEDEWER: I'm sorry. We are -- I just
17 was going to restate that. We were obviously in
18 receipt of amendment one and there's actually I
19 believe an amendment two out there on this particular
20 issue that's minor in nature but it's out there.

21 CHAIR YOUNG: Can we get that to everyone?

22 MR. WEDEWER: Surely. And I believe it's
23 dated June 7 and it just hit ADAMS and I don't have
24 the exact -- I believe it was June 26 or 27, but it
25 doesn't materially change, I believe, what's in the

1 amendment. There are again some minor corrections.

2 But the larger point is that we're
3 evaluating amendment one and amendment two. We intend
4 to apply the elements of the draft ISG to this renewal
5 application. The extent to which those amendments
6 address the ISG is just going to be a matter of review
7 and it would be wildly premature for me to speculate
8 on whether amendment one addresses all the points or
9 not. That's going to be -

10 CHAIR YOUNG: But it is the staff's
11 intention to make sure that, in your review, to make
12 sure that the ISG is complied with completely.

13 MR. WEDEWER: Yes ma'am.

14 CHAIR YOUNG: Okay. Ms. Hollis?

15 MS. HOLLIS: Nothing further.

16 JUDGE TRIKOUNOS: Just one more comment on
17 this issue. If you are renewing this now, I repeat my
18 comment that there does seem to be this lack of
19 statement in the amendment itself about how they cycle
20 back through corrective action.

21 CHAIR YOUNG: Any follow-up? It sounds as
22 though based on what the staff said do you still want
23 to make any argument here because the staff has made
24 a commitment to make sure that they will be complying
25 with the ISG completely.

1 MS. BARTLETT: We would be happy if
2 Entergy would comply with the ISG completely. It's
3 still not clear to us that amendment one demonstrates
4 that and even in this response to the judge, I don't
5 think Mr. Lewis clearly said that if moisture in the
6 area is found they would go back and chip away at the
7 concrete and do more of those measurements in the
8 embedded area. But I assume the NRC staff will make
9 sure that aging management plan spells all that out.

10 CHAIR YOUNG: Well, we just heard him say
11 that he couldn't tell me exactly that everything had
12 been followed but that NRC, the staff, is making a
13 commitment to see that everything in the ISG is
14 complied with. So does that make any difference in
15 your continuing to pursue this contention?

16 MS. BARTLETT: I think it does make a
17 difference.

18 CHAIR YOUNG: So are you willing to
19 withdraw it based on the staff's commitment?

20 MS. BARTLETT: I'll have to consult with
21 my boss here.

22 CHAIR YOUNG: If you want, you can tell us
23 after the lunch.

24 MS. BARTLETT: Yes, exactly.

25 JUDGE TRIKOUNOS: By the way, I also

1 wanted to just make one comment about the -- This
2 began at Oyster Creek and without really a great deal
3 of NRC staff intervention, Oyster Creek did take some
4 very elaborate steps including the removal of the sand
5 bed region or the sand from the sand bed region to be
6 able to have visual inspection on the outside. So I'm
7 not trying to imply that the Applicant would not be
8 responsible in this regard. I just wanted to make
9 sure that the comment was understood.

10 CHAIR YOUNG: Okay. You can get back to
11 us on that. But I mean if you decide to do that, you
12 can certainly state what that would be based on and
13 there is case law to the effect that any commitments
14 made by a licensee are considered to be in effect
15 conditions of the license.

16 JUDGE COLE: I note that the ISG is
17 identified as a draft. What's the status of the draft
18 and how close are they to final?

19 MR. WEDEWER: We anticipate that either at
20 the end of August or September, Your Honor, that
21 coming out in its present form.

22 JUDGE COLE: Okay. So the staff will also
23 try to assure that they come with the final ISG.

24 MR. WEDEWER: Yes sir. I mean they'll be
25 substantively identical. Just the draft will be out

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1 there.

2 CHAIR YOUNG: Just to put the final nail
3 on this, what may be -- We never want to say
4 anything's final, but is Entergy willing to commit to
5 completely comply with the ISG in whatever final form
6 it takes in accordance with the staff's commitment to
7 see that you do that?

8 MR. LEWIS: Judge Young, we'd like to see
9 the finalized ISG before I commit to say. I would
10 assume that if it's along the lines of the proposed
11 ISG that we would.

12 (Discussion off the microphone.)

13 MR. LEWIS: I think it would be
14 inappropriate to say we're going to commit before we
15 even know what it is.

16 CHAIR YOUNG: Well, I mean if there are
17 any significant changes in it I guess that would start
18 the time running for an immediately filed contention.

19 MR. LEWIS: I agree with that. I mean if
20 there is, you know, new information that gives good
21 cause for a new contention, the rules provide the
22 mechanism for it.

23 CHAIR YOUNG: Are you catching this, Ms.
24 Bartlett?

25 (No response.)

1 CHAIR YOUNG: Okay.

2 MR. LEWIS: NRC guidance positions give
3 one means of meeting a requirement. If there was
4 something brand new and different, then it was a big
5 deal for us and we have equally acceptable
6 alternative. We could propose it and that's the only
7 reason I'm hedging. I'm not suggesting any real
8 indication here that we wouldn't.

9 CHAIR YOUNG: Okay. Well, it does seem to
10 be a reasonable thing to consider that if there's a
11 commitment on the part of the licensee applicant and
12 the staff to see that the current version is complied
13 with and given that the contention is largely based on
14 the current version that that would be, might be,
15 grounds to consider withdrawing this contention and
16 then if there were a change and it were determined
17 that there was a dispute on that, then that would
18 start your time running for the filing of the new
19 contention on that new provision.

20 MS. BARTLETT: So the actual license
21 renewal would be conditioned on the commitment that
22 you've just been given.

23 CHAIR YOUNG: Yes, and I don't -- As I
24 understand the case law, anyone can correct me if I'm
25 leaving out anything, that any commitments made by an

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1 applicant in the adjudication process or considered to
2 be conditions I don't know whether that always results
3 in those conditions being spelled out in the
4 documents. Ms. Uttal or Mr. Wedewer?

5 MS. UTTAL: I think that if the Board
6 orders something to be done, then that is considered
7 to be part of the license. As to commitments, I don't
8 know if that's the case law. You would have to look
9 into it, but --

10 CHAIR YOUNG: I seem to recall that, but
11 I can't tell you the case myself.

12 MR. LEWIS: I don't believe the licensing
13 board conditions always get put in the license. I
14 think they have to be met and sometimes they're
15 addressed in the SER but they --

16 MS. UTTAL: They're considered to be an
17 amendment to the license even though they're not in
18 the license.

19 CHAIR YOUNG: Well, the case law I'm
20 talking about --

21 MS. UTTAL: (Inaudible) individual orders
22 are considered to be part of the license even though
23 they may not be in the license. Sometimes they put it
24 --

25 CHAIR YOUNG: That might be something to

1 give us some follow-up on because my recollection is
2 that there's also some case law that specifically says
3 that commitments made by licensees.

4 MR. GAUKLER: Your Honor, I was counsel
5 for PFS and then PFS (Inaudible) as Ms. Curran knows
6 well for eight years and that issue came up several
7 times specifically and the Commission specifically
8 said that commitments made by the licensee in the
9 course of the proceeding or even statements made by
10 the board and the licensee would do something do not
11 need to be put into license conditions.

12 CHAIR YOUNG: They are considered to be
13 commitments.

14 MR. GAUKLER: Right.

15 CHAIR YOUNG: And in effect, they're
16 conditions even though they're not spelled out in the
17 license.

18 MR. GAUKLER: That's correct, Your Honor.

19 CHAIR YOUNG: That's what I thought.
20 Okay. If there's any doubt about that -- Go ahead,
21 Ms. Hollis.

22 MS. HOLLIS: Your Honor, a question, a
23 follow-up question on that. And then does the NRC
24 assure compliance with those quasi conditions and/or
25 commitments? Is there a follow up by NRC staff and is

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1 its reactor oversight process ongoing or is it done
2 through the relicensing proceeding that it's pinned
3 down there that there has been observation and
4 compliance with those conditions?

5 MS. UTTAL: If they're considered to be
6 part of the license, then the licensee has to comply
7 with them and the NRC staff would assure compliance
8 through inspections and whatever other means we have
9 in the regulations that they're being complied with.

10 CHAIR YOUNG: Maybe a good way to handle
11 this would be for the participants to talk with each
12 other after this and come up with an agreement on how
13 to handle this and formalize that in some manner so
14 that there wouldn't be any doubt about it.

15 MR. LEWIS: Judge Young, part of the
16 license renewal process is an SFAR supplement which
17 basically contains and incorporates with the SFAR the
18 commitments that we make in license renewal and that
19 is the method by which these programs we're describing
20 or application get put into our current licensing
21 basis and become part of what we have to comply with.
22 That is the control mechanism that makes sure that we
23 do what we say we're going to do.

24 MS. UTTAL: That's also duplicated SER
25 that is published along with the license renewal. We

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1 have a list of commitments at the end of the document.

2 CHAIR YOUNG: And can -- When are the
3 expected dates on these?

4 (Discussion off microphone.)

5 CHAIR YOUNG: You already submitted your
6 SFAR I assume. Right? No?

7 MS. UTTAL: Well, they have to finalize it
8 at the end of the process, but the draft SER is
9 scheduled for March 7th and the final SER --

10 CHAIR YOUNG: March 7th of next year?

11 MS. UTTAL: Yes. And the final SER is
12 scheduled for September of 2007. I want you to
13 understand that we're at the point now, the staff is
14 at the point now, where we're just beginning the
15 analysis and the license amendment request.

16 CHAIR YOUNG: I think the concern is to
17 make sure that there's some method, if this is
18 withdrawn at this point, to make sure that there's
19 something, some method, something down in writing
20 somewhere so that it doesn't get lost in the shuffle.
21 So it seems that's why I suggested maybe participants
22 want to get together and do it, write up some
23 agreement about how that would be handled. That would
24 sort of memorialize it so that there wouldn't be any
25 concern about it not being later included since we

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1 can't control what's going to happen next year.

2 MS. UTTAL: But I think considering what's
3 been represented today that may be superfluous to do
4 that. The staff is very much interested in making
5 sure that the licensee complies with this interim
6 staff guidance.

7 CHAIR YOUNG: You may be right, but the
8 concern was expressed even though there was this case
9 law that the commitments do bind them, that we just
10 have some means of indicating that in writing so that
11 the public and the Town of Plymouth will know as
12 outsiders who are not involved intimately in the
13 process that they can count on this and I'm not
14 suggesting any particular way to do it. But if you
15 talk to each other, you may be able to work that out.

16 MS. UTTAL: Judge, I'm always willing to
17 talk with the Interveners.

18 CHAIR YOUNG: Right.

19 MS. UTTAL: But we'll need time to consult
20 with the staff and consider what to do before we -

21 CHAIR YOUNG: Sure. Yes.

22 MS. HOLLIS: Your Honor, a follow-up
23 question and that is with respect to these
24 commitments. Is the commitment process that's arrived
25 at by the staff and the applicant, is that a

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1 combination of contentions which may have been raised
2 and withdrawn because it would be resolved to that,
3 contentions which through the process may be resolved
4 through the process where issues are fixed or they are
5 determined not to be an issue which would rise to the
6 level of a contention but which would be handled in
7 the reactor oversight process and is it a package of
8 issues and resolutions thereof that is agreed to by
9 the parties and other interested players as a
10 commitment to undertake a variety of things which may
11 not have been directly, would not have been the
12 subject, may have been the subject of a hearing but a
13 hearing didn't take place on those issues? Is a way,
14 is it essentially a settlement or does it address
15 issues which the NRC has outstanding and which are
16 contentions which were raised but were not treated as
17 contentions so they were not accepted?

18 MS. UTTAL: Judge --

19 CHAIR YOUNG: I don't think --

20 MS. UTTAL: It really has nothing to do
21 with the contention process. This is a separate
22 process.

23 CHAIR YOUNG: Right. This is separate.

24 MS. UTTAL: This is -- These are things
25 that the staff discusses with the licensee during the

1 review of the license renewal application and
2 determines what the licensee needs to do and the
3 licensee will commit to doing it and it is memorialize
4 in two places as we said in the SFAR which cannot be
5 changed without going through the 50.59 process, but
6 it has nothing to do with contentions that are
7 dropped. It's just --

8 CHAIR YOUNG: Actually, Ms. Curran, you
9 might be helpful on this because you've been involved
10 in a number, a lot of proceedings, and I seem to
11 recall times when based on something that occurs or
12 some commitment that's been made there's some level of
13 agreement or withdrawal of a contention based on
14 something. Can you provide any elucidation on what
15 assurance the Petitioner, for example, or a member of
16 the public would have as a result of these kinds of --

17 MS. CURRAN: Well, I can tell you what I
18 would do which would be I'd want the licensing board
19 to -- I consider it a settlement of the contention and
20 I would want the licensing board to approve it because
21 basically what the intervener is doing is dropping an
22 issue that it wants resolved and it wants the
23 licensing board's help in getting this issue addressed
24 and is dropping that issue on the basis of commitments
25 made by the staff and the licensee. So if it were me,

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1 I would try to get, put this agreement before the
2 licensing board.

3 MR. LEWIS: (Off microphone) Can I just
4 talk on this for a second? Right now -- (On
5 microphone) Currently, our commitment is what's in our
6 application. In amendment one, we took the proposed
7 ISG... We put information we thought was fully
8 responsive. What happens in the staff review if they
9 require us to do more, how it changes, I can't commit.

10 CHAIR YOUNG: Right.

11 MR. LEWIS: So we've explained in our
12 application what we're doing. Our position remains
13 that there is no basis, there is no information
14 provided by the Petitioners that has a valid
15 contention. We're very interested in getting a prompt
16 ruling on the admissibility of the contention. I'm
17 glad to talk to the Petitioners in a break or
18 afterwards to see if there's something that we want
19 but I'm not planning on getting into a big settlement
20 agreement then because we don't even have an admitted
21 contention.

22 CHAIR YOUNG: It just struck me and this
23 is something to think about that you can talk about
24 that if there were withdrawal and it were submitted in
25 writing and specified that it's based on the

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1 commitment of the staff to assure that the current
2 version of the ISG is completely complied with that
3 that would put in writing the basis for your
4 withdrawal and probably what we would then do and this
5 is just my thinking at this point that we would just
6 note that the contention was withdrawn on the basis
7 that you state and then if for some reason you later
8 learned that that was not done, then the stated basis
9 for your withdrawal would be on the record and that
10 would presumably at that point give you grounds to
11 file another contention with the time running from the
12 time at which it became clear that the basis for your
13 withdrawal was no longer the case. And I see Ms.
14 Curran nodding.

15 MS. CURRAN: That's exactly the reason
16 that I would try to have the licensing board sign off
17 on it just as a protection because the issue was put
18 in and it's something that the Intervener would like
19 to see resolved and followed through.

20 CHAIR YOUNG: Okay.

21 MR. LEWIS: Judge, just on this point,
22 staff is going to require what the staff is require
23 when they finish their review. I don't want to enter
24 a process where we have a contention that's withdrawn
25 but is reinstated automatically if the Interveners

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1 later disagree with the SER. I'd rather have a ruling

2 --

3 CHAIR YOUNG: What I think I said was
4 that then there would be a responsibility on the part
5 of the Interveners once they became aware of or the
6 information was public to decide whether they wanted
7 to reinstitute or file a new contention based on that
8 new information at that point. And this would be, the
9 way we were discussing it, it would be based on the
10 staff's commitment. You've made clear what your
11 commitment is and it doesn't sound like it's identical
12 to the staff's commitment. So I don't think --

13 MR. LEWIS: I wouldn't be surprised if the
14 Interveners filed a new contention based on the SER.
15 I mean we would submit that it's a late filed
16 contention and needs to meet the criteria. So there
17 would need to be some new information and good cause.
18 We have described in our application what we're doing.

19 If the staff accepts that in the SAR and
20 the Interveners think there should be something more,
21 I would argue that's very late. The staff simply
22 accepted what we have in amendment one. If they think
23 that what we have in amendment one is inadequate, they
24 need to specify it. If they're willing to drop their
25 contention based on what we have in amendment one,

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1 that would make me very happy, but I'm not willing to
2 keep this process open.

3 CHAIR YOUNG: I thought this might
4 simplify things.

5 (Laughter.)

6 CHAIR YOUNG: You can do what you want to
7 do and if we get a withdrawal, we'll read what the
8 basis is and I'll be responsible for reading the law
9 and the late filed contention requirements and I
10 encourage you to consult with -- Ms. Curran has done
11 a lot of these proceedings and sort of knows the ropes
12 a little bit from the petitioner/intervener side of
13 the process. So --

14 MR. WEDEWER: Your Honor, if I could add
15 maybe just one point. There's some case law that
16 might be helpful out of the Ocone decision I
17 mentioned earlier and it's 49 NRC 328 page 338. It
18 talks about anticipatory contentions and I'm not sure
19 if it applies or not, but I think that may have some
20 bearing here.

21 CHAIR YOUNG: Okay.

22 MS. HOLLIS: Could you give us that cite
23 again?

24 MR. WEDEWER: I'm very sorry. It's 49 NCR
25 328 page 338.

1 CHAIR YOUNG: So we'll add this to the
2 list of potential things that maybe filed after the
3 oral argument. Okay. Anything more on contention
4 two?

5 MR. LEWIS: Judge, Brian Ford from our
6 Pilgrim plant is here now and maybe I could have a
7 five minute break to clarify this issue about the
8 discharge line so I don't need to submit another
9 letter later on if that's possible.

10 CHAIR YOUNG: Okay. Let's take ten
11 minutes and make sure we get back. We're actually
12 making good time this morning. So we may be able to
13 finish three and four before we break and then just --
14 Three and five rather than take a lunch break. All
15 right. Off the record.

16 (Whereupon, the foregoing matter went off
17 the record at 11:00 a.m. for a lunch break.)

18 CHAIR YOUNG: Let's go back on the record,
19 anything to report before we go on to
20 Contention 3?

21 MR. LEWIS: No, I've been unsuccessful for
22 further information, but I really need to talk to the
23 real reviewers to get it right and I don't want to get
24 it wrong, so I will do what was the original plan and
25 submit a letter explaining what it is that we've just

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1 added in scope and why.

2 Also, Mr. Gaukler talked to the
3 representatives of Pilgrim Watch and I think the
4 commitment they want is one, to comply with the final
5 ISG and I'm not willing to fly a pig in a poke, so we
6 just ask for a ruling on the --

7 MS. BARTLETT: Actually, the proposed ISG
8 we'd be happy with.

9 MR. LEWIS: I would say that our
10 commitment to comply is what it's in our application
11 now and if there's something more that you want, then
12 I just ask the Board to rule on the contention.

13 CHAIR YOUNG: All right then, you're not
14 limited to what discussions you have today. You're
15 free to talk to each other.

16 Let's go on to Contention 3 and we're
17 moving into the environmental side at this point, or
18 back into, I guess I should say.

19 Why don't you give us a brief summary of
20 where we are at this time on Contention 3?

21 MS. BARTLETT: Okay, this contention was
22 brought forward by Pilgrim Watch, because we believe
23 the environmental report is inadequate in that it
24 understates the true off-site radiological and
25 economic consequences of a severe accident at Pilgrim

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1 in its severe accident mitigation alternatives
2 analysis.

3 I think both Entergy and the NRC Staff has
4 agreed that this is within the scope of this
5 proceeding.

6 In our basis, we discussed some of the
7 problems inherent with probabilistic modeling and in
8 fact, the method that Entergy used to determine
9 whether a mitigation alternative is cost effective or
10 not, they multiply the consequences of accidents by
11 the probability of those accidents. So even if there
12 were an economically reasonable mitigation, it's very
13 likely it would be dismissed because the probability
14 of all these accidents is low. We concede that and
15 that is part of a SAMA analysis, the fact that the
16 probabilities are going to be very low.

17 But the bulk of our contention concerns
18 the fact that the known limitations that were inherent
19 in the software model used were not compensated for by
20 Entergy in its final analysis. The bulk of our
21 contention highlights input data that were incorrect,
22 incomplete or inadequate. The meteorological data
23 used was inadequate to correctly model the dispersion
24 of a plume at the coastal site subject to sea breezes
25 and terrain variability.

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1 The emergency response data was from an
2 older report, but neither the old nor the new report
3 give realistic evacuation delay times or evacuation
4 travel times. They ignore the likelihood of shadow
5 evacuation which is the evacuation of other towns
6 feeding on to Route 3 that would contribute to major
7 traffic congestion.

8 As well, the software model used can only
9 model the economic costs of mitigative actions
10 following a severe accident, so the enormous economic
11 devastation that would result in this region if there
12 were a severe nuclear accident was not taken into
13 account in the cost benefit analysis.

14 The purpose of a SAMA review is to ensure
15 that any plant changes that have a potential for
16 significantly improving severe accident safety
17 performance are identified and addressed.

18 I guess, right, as an example of how the
19 outcomes could be affected by this understatement of
20 the consequences, we discussed the direct Torus vent
21 filter, but the fact is what we're asking for here is
22 not any particular mitigation. We're really asking
23 for the analysis to be done properly and I think the
24 regulations, the wording in the regulations is broad
25 enough that it requires a general analysis of the cost

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1 benefits of mitigations.

2 I don't think the fact that the industry
3 uses a certain software model is an excuse for not
4 doing it properly.

5 CHAIR YOUNG: Did you look at the
6 information that we were given at the end of
7 yesterday?

8 MS. BARTLETT: Very briefly.

9 CHAIR YOUNG: Because that goes into a lot
10 of the SAMAs and some of the analysis that was done in
11 response to the RAIs by the Staff.

12 MS. BARTLETT: Right.

13 CHAIR YOUNG: Does that change any of the
14 arguments that you --

15 MS. BARTLETT: Well, I've made it pretty
16 clear in our contention that we are not capable of
17 crunching the numbers on these mitigation
18 alternatives. So, for example, where in the
19 application it showed that the benefit of a direct
20 Torus vent filter would be zero, they've now changed
21 the benefit to \$800,000. Well, I can't tell whether
22 that's reasonable or not. I can only tell that the
23 inputs they used were not reasonable.

24 The economic inputs alone are wrong by
25 orders of magnitude. So to my mind, a filter that

1 goes \$3 million that could prevent radioactive fallout
2 in this region and wreck the tourism industry would be
3 a good investment. But again, I can't tell whether
4 the actual new analysis that was done is more
5 compliant with what I'm asking for or not.

6 This is beyond our abilities and it's
7 certainly beyond what we need to do to get admitted.

8 CHAIR YOUNG: So you're relying on the
9 inputs.

10 MS. BARTLETT: Mainly on the inputs, but
11 we've also addressed the fact that I believe even one
12 of the NUREG 1555 or something, cited by Entergy's
13 counsel, stated that what needs to be looked at is
14 mitigation that could reduce either the potential or
15 the consequences of these accidents and I don't
16 believe that's what's going on here. I think they're
17 multiplying consequences by small numbers and finding
18 out that the costs are always greater than the
19 benefits of these alternatives. But again, we're
20 mainly addressing what we do know and those are the
21 input data.

22 CHAIR YOUNG: Mr. Lewis, let's go to you
23 next.

24 MR. LEWIS: Let me just briefly address
25 the points addressed by Pilgrim Watch. Our answer

1 really contains our main arguments and there's a lot
2 of points that were raised in this contention. I'm
3 not going to even try to repeat them, but I am still
4 relying on my answer that addresses all of the
5 specifics. But most of what Pilgrim Watch raises are
6 mere generalizations. They refer to known code issues
7 that might make a difference in the analysis. But they
8 don't show that any of these issues in fact, were
9 germane to our analysis or that we didn't understand
10 the code. And I think you have to do more to say that
11 somebody points -- has pointed out that if you use a
12 code wrong, it can produce a wrong result.

13 In fact, the same documents that Pilgrim
14 Watch cites indicates that if you know what you're
15 doing, issues with the code are not a problem. You
16 just need to have competent analysts and there's not
17 one iota of basis in anything they provided to
18 indicate that our analysts didn't understand the code
19 and the limitations of the code.

20 One of their main points was we should
21 have used the most recent version. I think it was
22 1.13 and we used 1.12, a newer version came out
23 afterwards. In response to the NRC questions, the NRC
24 asked us a number of RAIs related to not our code
25 methodology, but were we sufficiently conservative in

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1 looking at external accident risks, were our source
2 terms sufficiently conservative, should we account for
3 differences in fuel in the future?

4 We produced that RAI response in
5 addressing these questions because we had to rerun the
6 analyses. We agreed with the NRC Staff that we would
7 add in some more conservatisms. We multiplied our
8 risk by a greater factor to account for our -- our
9 internal risk by a greater factor to account for
10 external risks, so we had to rerun the code anyway.
11 We ran it with the newer code just to show the proof
12 is in the pudding. It didn't make any difference and
13 we, in fact, in that RAI response, looked at the code
14 differences and showed that the areas that had been
15 previously identified as issues weren't areas that
16 affected our analysis at all.

17 You can either look at that response as
18 mooted the issue or simply confirming that there was
19 never anything other than mere generalizations here in
20 the first time. There was never anything that
21 indicated there was really a genuine dispute that we
22 used the code improperly.

23 CHAIR YOUNG: What about the allegation
24 that the inputs on some things like the plume, I
25 guess, and the evacuation issues? I think your

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1 argument is that they haven't shown that those changes
2 in inputs would make a material difference?

3 MR. LEWIS: That's correct.

4 CHAIR YOUNG: But do you know what
5 difference, yourself, do you know or does your client
6 know what difference they would make such that you
7 could enlighten us on that?

8 MR. LEWIS: Let me give you the evacuation
9 time estimates as an indication and Pilgrim Watch
10 presumably has both sets. They referred to them both.

11 The analysis uses the average evacuation
12 time, so it takes the best time and the worst time and
13 averages them. If you take the best time and the
14 worst time in the 1998 study and average it, and if
15 you take the best time and the worst time from the
16 2004 study and average it, you get exactly the same
17 time. No difference whatsoever.

18 So we think it was incumbent on them.
19 They have the studies. They could have looked at what
20 the average times were. They could have done this.
21 You've asked me the questions, so I'm telling you the
22 substantive answer and the answer is it wouldn't have
23 made any difference.

24 CHAIR YOUNG: I think what they were
25 asking, if I understand it correctly, that you not

1 take the average, but you consider the unique
2 circumstances of this area.

3 MR. LEWIS: We do two things. We do a
4 base case analysis and again, we have just in our
5 answer, the assertion that we have to look at the
6 worst case because that's not the NEPA case law. If
7 you're trying to analyze a severe accident, what
8 you're basically saying is here is a reasonable --

9 CHAIR YOUNG: Right, you don't take the
10 worst case, but just to respond to their argument that
11 you do consider unique circumstances, the high and
12 growing population in this particular part of the
13 country and the economic aspects of the tourism and so
14 forth that have been discussed before, I think in the
15 plume and the -- well, in any event, without saying
16 that you take the worse case scenario, do you know
17 what difference it would make if you used the sort of
18 site-specific information as inputs, as opposed to the
19 averages?

20 MR. LEWIS: In our current application, we
21 do two things. We have our base case analysis and we
22 use the average evacuation time, but then we do a
23 sensitivity analysis with a bad weather scenario and
24 we look at, if you use the bad weather scenario, what
25 is the change in the results of the SAMAs and it was

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1 only a two percent, less than two percent change --

2 CHAIR YOUNG: But still, I guess what I
3 was trying to get at is if you use -- I don't know how
4 much difference using the site specific as opposed to
5 the average as compared to applying the uncertainties
6 to the use of the average would be --

7 MR. LEWIS: All of these numbers are
8 based on the evacuation time estimates. They are all
9 site specific. The evacuation time estimates have a
10 whole lot of different scenarios. They have a
11 scenario for peak population with the summer and good
12 weather and summer and rain and they have off-season
13 good weather and they have off-season snow and there's
14 a lot more.

15 CHAIR YOUNG: So you're saying the
16 averages are averages of site specific -- different
17 site-specific information?

18 MR. LEWIS: Yes. What I'm saying is if
19 you look at all the different scenarios and you took
20 the fastest evacuation and the slowest evacuation and
21 you average that just to say what's the mean
22 evacuation speed.

23 CHAIR YOUNG: From this particular plant?

24 MR. LEWIS: Yes, from your site-specific
25 evacuation estimates, using the 1998 evacuation time

1 estimates, site-specific evacuation time estimate
2 wouldn't make any difference than the result you'd get
3 if you used the 2004 site-specific evacuation time
4 estimate. And I would say that they've got the
5 analyses, it's their burden to show that there's some
6 materiality referring to the fact that there's a later
7 study. There's often later studies. When you do
8 these analyses, they're very complicated analyses.
9 They're time consuming.

10 At some point you just have to do a cut
11 off and say this is the study that exists. This is my
12 co-version that exists at the time. I've got to use
13 it and that's what we did. The fact that there's a
14 later evacuation time estimate shouldn't be a basis
15 for a contention without some indication that it makes
16 a difference. Here, there is absolutely none.

17 CHAIR YOUNG: Ms. Hollis?

18 MS. HOLLIS: Your Honor, this is probably
19 the single issue I would put at the top of our list of
20 general concerns on behalf of the Town of Plymouth.
21 And I think not all nuclear plants are created equal
22 and not all time lines should be assumed to fit every
23 scenario for every nuclear plant. We have had a very
24 significant population growth in and around the area,
25 between 1998, almost 10 years ago, and the present.

1 Second, due to the nature of the town and
2 the fact that it is prominent in American history,
3 prominent in American culture, prominent across the
4 world as being a major tourist destination, because we
5 see like on July 4th an upsurge of about 100,000
6 people in and around from all over the country who
7 come on that peak time period. It's not just one day,
8 but certainly that's the apex of the activity level.
9 And there's other times during the year, Thanksgiving
10 and the like, for obvious reasons.

11 It is a bit of a jewel in the crown of
12 American history and culture. And in that vein and
13 because of the unique geography of Plymouth and the
14 plant location within Plymouth, the geography, the
15 meteorological issues, the whole package of issues
16 that make this site somewhat different in some major
17 ways from many other nuclear plants that are located
18 in less obvious, less famous areas of the country, and
19 also not located necessarily on seacoast where there's
20 meteorological issues and also where there are, by the
21 limits of the geography, which is you're running up
22 against a seacoast, because you have old roads and
23 roads which are designed for a different time.

24 And in a couple of cases, one which is a
25 reasonably large and modern road, but which would

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1 immediately be flooded with traffic. And anybody that
2 drives on that road back to Boston coming in or coming
3 out during peak rush hours knows that there is a very
4 severe traffic problem even when there's not an
5 emergency situation.

6 So in that light, I think we, our view is
7 that the issue of evacuation needs a full and thorough
8 study and that's something that certainly has been
9 causing us a concern and it's one where we would like
10 to see more study and uniquely suited to the
11 conditions which are real here. Population growth,
12 unique nature of the town, unique nature of the
13 geography surrounding the town and the plant and
14 factor all those issues in together, in an updated
15 real-time almost or at least reasonably real-time
16 analysis as to what the real situation is and not an
17 average. It's an average, it may work in a lot of
18 places where things are not changing as dramatically,
19 as far as population growth and traffic congestion,
20 and tourism, which is our lifeblood.

21 So those are the issues I'd like to raise
22 and I would request that the NRC and both the NRC and
23 Entergy take a close look at this and review as to
24 whether this analysis is adequate for the
25 circumstances.

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1 Thank you, Your Honor.

2 MR. LEWIS: Judge Young, this is actually
3 a good interruption because it raises a broader point.
4 The issue here is whether we've done a reasonable SAMA
5 analysis. The issue here is not adequacy of emergency
6 planning. Adequacy of emergency planning is
7 absolutely outside the scope of this proceeding.

8 MS. BARTLETT: We agree. That's not our
9 contention.

10 MR. LEWIS: What I'm hearing though is
11 there has to be a better evacuation time estimate for
12 what I thought was being said was to ensure the
13 members of the public can evacuate and there has to be
14 a real time system. Those go to what do you do in the
15 event of a real evacuation?

16 We have, as I said, our evacuation time
17 estimates have a whole range of different scenarios,
18 a whole range of different conditions, with different
19 populations at different times of year and different
20 weather conditions. That's in there.

21 For purposes of doing a SAMA analysis,
22 we're trying to do one reasonable base case with a
23 whole lot of different alternatives. We run
24 sensitivity analyses and then we do a bounding
25 analysis where we multiply our best case by very large

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1 factors to make it very bounding.

2 Our analysis is certainly on its face
3 reasonable and it is the burden of Petitioner to
4 demonstrate that he has some information that is
5 material, that he has some information to offer that
6 indicates that what we did is wrong in a way that
7 matters and that is what is lacking here.

8 CHAIR YOUNG: I think possibly some of the
9 confusion may come from the use of the word
10 "averaging" and what that averaging includes. And
11 that's why I was asking you to explain that a little
12 bit more fully. It sounds as though from your earlier
13 explanation a few minutes ago, that you were saying
14 that the averaging is all site specific and then you
15 mention the 1988 and the 2004 --

16 MR. LEWIS: 1998.

17 CHAIR YOUNG: 1998 and the 2004. Did you
18 average between those two times or did you do one
19 analysis using 2004 figures?

20 MR. LEWIS: Our application and it's
21 described in the environmental report, had to provide
22 an evacuation velocity as an input to your model to
23 figure out what the consequences were of SAMAs.

24 CHAIR YOUNG: Right.

25 MR. LEWIS: What we did is we took the

1 1998 evacuation time estimate which was the version
2 that we had when we began preparing this analysis,
3 that was the version that was on the shelf and for our
4 base case, we determined the average, an average
5 evacuation time, based on the scenarios in that 1998
6 report.

7 Then we did again, based on that 1998
8 report, a sensitivity analysis looking at a bad
9 weather scenario and we showed that that would change
10 the results by less than two percent. So going to a
11 worse scenario had very little results, very little
12 change on the outcome.

13 And you need to realize that we found a
14 few SAMAs potentially cost beneficial. All the ones
15 that weren't potentially beneficial, the benefit would
16 have had to double for them to become beneficial and
17 these changes of evacuation times, going to a bad
18 weather scenario was only changing the results by two
19 percent.

20 CHAIR YOUNG: But I thought you mentioned
21 that there was a --

22 MR. LEWIS: The Intervenor's point about
23 that, since we did our analysis, a 2004 newer version
24 -- we did an updated version of our evacuation time
25 estimate that was issued end of 2004. They just point

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1 to it and say there's a new evacuation time estimate,
2 your analysis must be wrong. They didn't do any
3 analysis of their own of the numbers --

4 CHAIR YOUNG: But didn't you say that you
5 had done a new analysis using the 2004 figures?

6 MR. LEWIS: Not in our evac -- what I was
7 saying is if you look at those numbers, I have, me
8 personally, we haven't revised our application, but if
9 you look at the numbers in the 2004 evacuation time
10 estimate, they're not significantly different from the
11 numbers that were in the 1998 estimates. And I submit
12 it's incumbent upon the Intervenors to point out some
13 difference that matters and I was pointing out, based
14 on my review, that if I took the best and worst time
15 from the 1998 study; I took the best and worst time
16 from the 2004 study; and I averaged those, it would
17 come exactly the same. That's not in their
18 application --

19 MS. BARTLETT: Judge Young, can I respond
20 to that?

21 CHAIR YOUNG: Yes, but hold on. Okay.

22 Those were the evacuation times. What
23 about the geographic and meteorological --

24 MR. LEWIS: Let me address the
25 meteorological data. The code that runs these

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1 analyses can only use one year's worth of data. So
2 you have to choose a representative year. We chose
3 the year that we thought was representative.

4 Petitioners say well, you should have
5 chosen another year or you could have chosen five
6 years, but they don't have anything to indicate that
7 our year that we chose is not representative.

8 Further, when you look at how the model
9 does it, the model has a number of -- I think I
10 mentioned yesterday there were something like a dozen
11 different accident scenarios. And the way the model
12 handles this is that it runs these accident scenarios
13 occurring throughout the year on an hour by hour basis
14 and comes up with a mean distribution of the -- a
15 normal distribution of the consequences and
16 essentially we choose the mean.

17 So it takes this year's worth of data,
18 hourly by hourly, and considers how all the different
19 scenarios could work if they happen any time in the
20 experience and comes up with a distribution of
21 consequences and then we use the mean value as the
22 reasonable representative severe-accident case.

23 So we have a representative year, no basis
24 by the Intervenors to oppose it and basically it
25 aggregates all the different possible scenarios in

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1 this reasonable year's worth of data so that if you do
2 get things like there might be a period when the
3 wind's blowing north and then later when it's blowing
4 south, by aggregating all the different meteorological
5 conditions over a year on hour by hour basis and
6 looking at how the scenarios can run in any of these
7 time frames, this produces a distribution of
8 probabilistically-valid distribution. We choose the
9 mean.

10 It's incumbent again upon the Intervenors
11 to say here's why what you did is wrong. They really
12 don't. The only thing they pointed to was a Reg.
13 Guide that applies to control room habitability
14 analyses where the NRC wants more data and that's very
15 specific in trying to figure out how winds are
16 actually moving around one little building as opposed
17 to a large macroscopic area.

18 They've provided no basis whatsoever to
19 indicate that we didn't use representative data in our
20 SAMA analysis.

21 CHAIR YOUNG: Go ahead.

22 MS. BARTLETT: Yes, I did want to address
23 right away the Entergy counsel's comments about the
24 evacuation time reports. We actually believe that
25 both of those reports, the old one and the new one are

1 operating on faulty assumptions and we spend pages and
2 pages discussing that. We submit a report that was
3 done after Three Mile Island to support us. We
4 discussed the Katrina evacuations.

5 To my mind, if they use sensitivity
6 analyses, and both the more conservative point is
7 still not conservative enough, of course, they're not
8 going to find a major change between those two
9 sensitivity analyses. We are demonstrating that if
10 there were an accident here, the worse case -- or the
11 conservative assumption of the longer delay time being
12 six hours from this area is not reasonable. And we
13 also discuss the evacuation delay time in the same
14 way.

15 But if we are going to be required to
16 actually show that the results of the SAMA analysis
17 would come out differently, I urge you to look, in
18 particular, at the economic information that we've
19 submitted. The fact that the model can't handle a
20 region's economy as part of its analysis, to me,
21 doesn't get the Applicant off the hook from
22 considering that. If they were even to just take our
23 -- I think we mentioned \$353 million a year in this
24 area spent on tourism alone, well how -- that could
25 easily double the benefits of some of the mitigation

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1 that they've proposed. They're not counting -- it's
2 not even that they're counting that wrong. They're
3 not counting it at all because it doesn't fit in the
4 software.

5 But the regulation was not written to say
6 that a certain software code has to be use.d It was
7 written that you have to weigh the costs and the
8 benefits and I'm sure Plymouth's lawyer would agree
9 that we know that the benefits of some of these
10 mitigation things were under counted and that the cost
11 of severe accidents would be far greater than what
12 Entergy is asserting. So even if you want to put
13 aside, I think the weather information is important.
14 The evacuation information is very important, but the
15 economics alone would change the outcome of many of
16 these.

17 He talks about all of the mitigation
18 alternatives that they looked at and then I believe
19 they came up with five. Four of them are procedural
20 changes and one of them, I think is a fuse box. I
21 mean these are not major safety investments being made
22 by Entergy as part of its relicensing.

23 These are - -and in their reply to me,
24 Entergy said well, the regulations never said we were
25 going to have to do anything expensive here. Well, I

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1 don't think that -- I mean what are we here for? That
2 doesn't get them off the hook on a SAMA analysis.

3 So again, we're not -- we don't have the
4 ability to crunch these numbers, but I think we've
5 demonstrated enough to show that there were problems
6 in the analysis and they may be industry practices,
7 but I don't think they're a proper analysis of the
8 SAMAs.

9 CHAIR YOUNG: Let me just ask you, you
10 said several times that you don't have the ability to
11 -- you don't have an expert at this point and you
12 don't have the ability to do the fine tuned analysis
13 at this point.

14 MS. BARTLETT: Right.

15 CHAIR YOUNG: If we were to admit a
16 contention like this would you then have an expert who
17 would be able to provide testimony about the analysis
18 and do an analysis and provide testimony about that in
19 more detail?

20 MS. BARTLETT: I think we would try to get
21 an expert. This is obviously beyond our mathematical
22 abilities, but certain experts have prepared studies
23 for Indian Point, for example, which showed huge
24 economic devastation to the region if a severe
25 accident happened.

1 The Massachusetts Attorney General has
2 submitted a report which has showed much bigger
3 numbers from a severe accident than Entergy is
4 submitting, but we would try to get our own expert,
5 yes. It's not economically feasible for us to do it
6 before we're even admitted, but at that stage Pixie
7 is going to pay.

8 (Laughter.)

9 JUDGE TRIKOUNOS: Are you done?

10 MS. BARTLETT: Done for the day or for
11 this contention? I am done for now.

12 JUDGE TRIKOUNOS: I had a question and I
13 wanted to find the right time to ask you.

14 MS. BARTLETT: Sure.

15 MR. LEWIS: This is a very challenging
16 contention to address because the target keeps
17 changing, but I believe what I just heard Pilgrim
18 Watch say is that they don't have any real dispute
19 between the 2004 and the 1998 studies. They think
20 they're both wrong. So the original assertion out
21 there was inaccurate because we didn't use the 2004
22 study -- seems to have evaporated and the target now
23 seems to be this assertion that we don't have the
24 right economic costs in our analysis.

25 CHAIR YOUNG: Let me just interrupt you

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1 for a second. What if the information -- let's assume
2 that information were brought forward and it
3 was not included in either of the studies, but it
4 appeared to be true and significant and that would
5 have an effect.

6 Would you then take that into account?

7 MR. LEWIS: I presume that if we believe
8 that the numbers were wrong, we would have an
9 obligation in the rules to correct any materially
10 wrong information that we provided. Absolutely.
11 Those without any indication at all that our
12 evacuation time estimates are wrong, I mean they're
13 prepared very professionally. They're submitted to
14 the NRC.

15 CHAIR YOUNG: I just wanted to know what
16 you would do. What about the assertion about your not
17 including the economic information at all?

18 MR. LEWIS: First of all, I heard a couple
19 of numbers just now that I'd never heard before. I
20 heard that there was a \$350 billion --

21 MS. BARTLETT: It's on page 44 of our
22 petition.

23 MR. LEWIS: Oh, it is?

24 (Pause.)

25 MS. BARTLETT: Down at the bottom. "So

1 obviously under counting the region as a whole" --

2 MR. LEWIS: I see. Okay. \$350 million.

3 I understand now.

4 First of all, the Petitioners do not, in
5 fact, provide any basis that there is significant
6 economic cost that's not been considered. They refer
7 to and provide as a reference the MAX2 User's Guide.
8 It's their document. It's appropriate for the
9 Licensing Board to look at the documents that
10 Petitioner cites as references. When you look at
11 those documents. In fact, you see that the modeling
12 includes the economic costs and there are economic
13 costs associated with mitigative actions, but that
14 doesn't mean that you don't include loss of income,
15 loss of business income, loss of personal income.

16 The code, the analysis that we do and it's
17 clear in the description of the inputs in this User
18 Guide that the Pilgrim Watch cites includes loss of
19 personal and business income if businesses are
20 interdicted, if they have to be relocated, if they're
21 condemned, if they're interrupted. So those loss of
22 business and personal incomes are in our analysis and
23 that's evident from the face of the documents that the
24 Intervenors cite.

25 The only thing they've referred to now is

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1 that there are -- they refer to these tourism dollars
2 and they refer to -- they provided in their reply a
3 study that estimated the travel-related revenues of
4 the entire State of Massachusetts, presumably going
5 all the way out to New York State. What they never
6 indicate is how that would affect the analysis. For
7 example, they never indicate that even if you added
8 the entire amount that is estimated in that study, I
9 think the study indicated that Massachusetts derives
10 about \$11 billion from travel-related revenues,
11 including business travel, including recreational
12 travel and includes hotels and recreation and lodging.
13 They don't show, for example, what would happen if we
14 added the entire \$11 billion in the analysis. They
15 don't show that it would change one single SAMA.

16 In sum, they don't show that there's
17 anything material here. And I think it's incumbent --
18 they say well, we don't have the experts. We don't
19 have the ability to run any numbers, but there is a
20 basis requirement. There is a requirement to
21 demonstrate there is a genuine issue. There's a
22 requirement to demonstrate that there's allegations
23 that make a difference. And this is particular
24 important in SAMA analysis.

25 As the Commission has pointed out in one

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1 of its decisions, there's many, many SAMAs and there's
2 -- equally is true there are many inputs. If all
3 anybody had to say is there's some other number that
4 you could use or there's some other SAMA that you
5 could have considered, we would never be able to do a
6 SAMA analysis. There would be nothing that we could
7 ever do that would satisfy the world. We've taken
8 reasonable assumptions. We've taken evacuation time
9 estimates that are based on the accepted emergency
10 planning evacuation time estimates. I would submit
11 that's prima facie, reasonable on its face.

12 We've used the state-of-the-art code to
13 model the economic impacts. It's the code that the
14 NRC uses in every one of its financial analyses. It's
15 the code that's called out specifically by the NRC in
16 their financial technical handbook.

17 Again, I would submit that on its face
18 that's reasonable and it's incumbent upon a petitioner
19 who wants us to -- wants to have a contention, saying
20 that its' inadequate to show that there's, in fact,
21 some different input that should have been used that
22 would have made a difference and that is totally
23 lacking in this instance.

24 CHAIR YOUNG: Let me just see if I can
25 understand something. There are references to the

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1 valuations, including the assessed value of property,
2 but not the business value and the tourist dollars and
3 so forth.

4 I think what I heard you say was that the
5 contention ignores the fact that the business costs
6 are taken into account, but looking back at this, they
7 do seem to recognize that some economic values are
8 taken into account, but they're saying that others
9 aren't.

10 You say that they should show that it
11 makes a difference and they should -- I would assume
12 that that would involve doing the same kind of PRA
13 analysis that you've done in order to show that. Am
14 I missing something there?

15 MR. LEWIS: No, I don't think you have to
16 do the PRA to do that. As I mentioned, when you look
17 at the benefit of the SAMAs for the -- once you get
18 past the few that are potentially cost beneficial and
19 we say are, the next one down you have to more than
20 double the benefit before it looks cost beneficial.
21 You can look at the numbers. I mean the economic
22 costs are in the environmental report. They're tens
23 of billions of dollars.

24 And you realize that you have to double
25 those economic losses for the next SAMA to become cost

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1 beneficial. If they're talking about well, maybe
2 there's a \$350 million tourism impact, that should be
3 considered, that's not going to have any impact on any
4 of our SAMA analyses and it is incumbent upon them to
5 say here, look, we're showing you an economic input
6 that affects your results. Even on that fairly
7 qualitative level, this contention totally fails to
8 demonstrate a real, genuine dispute, a dispute that
9 shows that some of our SAMA analyses are wrong and
10 there's additional SAMAs that are beneficial.

11 CHAIR YOUNG: Are you at the same time, as
12 you're saying that, are you at the same time saying
13 that even if you did take the figures that they're
14 suggesting into account, that it would not, in fact,
15 make a difference?

16 MR. LEWIS: I don't think they've shown it
17 makes a difference.

18 CHAIR YOUNG: I know you don't think
19 they've shown it, but I'm asking, are you are the same
20 time --

21 MR. LEWIS: I'm not sure I even know what
22 the number is that they're suggesting should be added.
23 I don't think that a \$300 million figure would make a
24 difference, based on when I look at the economic costs
25 that are projected in the environmental report and I

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1 think that I've got to double the cost before any
2 other SAMA is going to look cost beneficial, I don't
3 believe -- I haven't done this rigorously. Certainly,
4 the company has not done this, but when I look at the
5 numbers, it doesn't appear to me that it would affect
6 the analysis.

7 Again, I haven't tried to redo the
8 analysis, but I don't even see anything that indicates
9 that, in fact, there's an indication that there might
10 be a need to.

11 CHAIR YOUNG: Okay. Anything further?

12 MR. LEWIS: Let me just look at my notes
13 very quickly.

14 JUDGE TRIKOUNOS: Let me ask you, the
15 \$2000 per person rems, is that the standard number
16 nowadays?

17 MR. LEWIS: Yes, that comes out of the NRC
18 guidance. That's not on the economic cost. That's
19 the cost of health effects.

20 JUDGE TRIKOUNOS: Yes.

21 MR. LEWIS: I guess the only thing I
22 wanted to point out, the one insightful aspect of the
23 petition was that we made a mistake in one of our
24 SAMAs. It was the direct filtered vent. It was the
25 only SAMA where the benefit of the SAMA wasn't a

1 change in action or frequency, it was a change in the
2 source term and we ran the case with our baseline risk
3 assessment and we put in the SAMA. We didn't input
4 into the code the reduced source term. It was an
5 embarrassing mistake and therefore, it had no benefit
6 and it was an insightful catch on their part and we
7 have corrected it in that RAI response.

8 It has nothing to do with any code errors.
9 It has nothing to do with not having the right
10 economic inputs or evacuation time estimates or
11 meteorological data. It was an error in inputting the
12 appropriate source term.

13 CHAIR YOUNG: What about the filter?

14 MR. LEWIS: That is the SAMA. As the RAI
15 response shows, with the correct analysis, it's still
16 not cost beneficial.

17 CHAIR YOUNG: Okay.

18 JUDGE TRIKOUNOS: The Staff obviously
19 reviewed these MAX2 analyses that were done. They've
20 been RAI-associated that we recently saw. In their
21 review, did the Staff request an input deck from the
22 Applicant?

23 MS. UTTAL: I don't believe so. No, it's
24 not something that the Staff would normally do.

25 JUDGE TRIKOUNOS: Well, okay. I've seen

1 RAIs from the Staff that requested input decks many
2 times in things that I reviewed.

3 MS. UTTAL: In license renewal area they
4 ask for a general description of the input in
5 different areas. But they don't ask for the actual
6 input deck.

7 JUDGE TRIKOUNOS: So the Staff has never
8 actually reviewed the detailed MAX2 input?

9 MR. LEWIS: I'm not sure if it's never.
10 I'm trying to rack my brains of other license renewal
11 proceedings. I don't know that they've been
12 submitted. My recollection is there have been other
13 proceedings where the NRC has inquired into inputs. I
14 don't know whether they've asked for the entire deck
15 or something inquired during their site audits.

16 MS. UTTAL: I don't think they've
17 requested the entire deck because it's a huge
18 document, but they have asked for specific inputs in
19 areas of interest.

20 JUDGE TRIKOUNOS: Okay, I was trying to
21 establish whether or not that input deck was available
22 in the public record for a party to get a copy of and
23 take a look at.

24 MS. UTTAL: It's not.

25 JUDGE TRIKOUNOS: But the NRC is

1 continuing to review the MAX2 analysis as we speak?

2 MS. UTTAL: I don't think the review is
3 done, finished, at this point.

4 JUDGE TRIKOUNOS: And you are -- and the
5 Staff is reviewing all of these areas that have been
6 discussed here, I assume.

7 MS. UTTAL: Yes.

8 JUDGE TRIKOUNOS: So it's a work in
9 progress?

10 MS. UTTAL: Yes.

11 CHAIR YOUNG: The specific areas that we
12 have been going over that have been raised by the
13 Petitioners?

14 MS. UTTAL: Yes.

15 CHAIR YOUNG: Yes?

16 MR. LEWIS: I'm done now. Thank you,
17 Judge Young.

18 (Pause.)

19 MS. UTTAL: The Staff will be asking
20 questions of where they identify issues in specific
21 areas. If the analysis looks consistent with other
22 analyses or looks correct, they won't be asked -- and
23 they have no questions about it, they won't be asking
24 questions about that.

25 CHAIR YOUNG: Why don't we move on to your

1 argument more generally.

2 MS. UTTAL: Well, I really have nothing to
3 add that's not in my brief or hasn't been touched upon
4 by Mr. Lewis.

5 CHAIR YOUNG: Is the reason that the Staff
6 is not asking the specific questions that the Staff is
7 confident that the issues raised by the Petitioners
8 would not make a difference?

9 (Pause.)

10 MS. UTTAL: The questions in the RAIs that
11 you have the responses to now were asked prior to
12 these petitions having been filed. Now it may be that
13 based on the petitions that the Staff may look into
14 other areas where they haven't before, but it would be
15 areas where they see anomalies.

16 CHAIR YOUNG: Anomalies based on
17 information about the specific location or based on
18 more broad --

19 MS. UTTAL: Based on what they know about
20 SAMA analyses and the codes and the inputs that should
21 go in there and the general results and --

22 CHAIR YOUNG: I guess what I was trying to
23 get you to address was the site-specific question.

24 (Pause.)

25 MS. UTTAL: If you see from some of these

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1 questions NRC RAI 4, it's on page 41 of the
2 information we were given yesterday, that this 41 of
3 68, you'll see that the Staff has asked site-specific
4 questions. And I imagine that they come across
5 anomalies or areas of interest, it will probably be
6 site specific questions that they're seeking.

7 But they just haven't seen anything as of
8 this date that would require them to ask the
9 questions. But because it's a work in progress, it
10 could happen.

11 CHAIR YOUNG: Anything further?

12 MS. UTTAL: No, I have nothing further.

13 CHAIR YOUNG: Ms. Hollis?

14 MS. HOLLIS: Yes, just to close the loop
15 from our standpoint, first, we are not here opposing
16 the Entergy relicensing. We're not anti-plant. We're
17 not anti-Entergy, and in the context of SAMA or
18 anything else, our concerns are obviously always going
19 to be first, last and always the health, safety,
20 protection of the citizens of Plymouth and those who
21 come to participate in the culture and history and the
22 pleasure that the Plymouth and surrounding environs
23 provide to the world and to the country specifically.

24 So we're to say how can we make it better?
25 How can we get a full understanding? What can we do

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1 in our world with Entergy's help, with the NRC's
2 oversight to make our situation better? And however
3 that transpires, whether it's through the relicensing
4 process, whether it is through rulemakings at the NRC,
5 whether it's a combination of both or whether it's by
6 decisions on the part of Entergy to make things
7 better.

8 Is everything perfect and doesn't need to
9 be improved? Nothing is ever perfect. When the
10 studies were done back in 1998, we lived in a more
11 innocent time. I think the population was much lower
12 and the traffic was lower. It was a different world.

13 The world has changed. What can we do in
14 light of changed circumstances to address the issues
15 which have been raised here and which the NRC in its
16 protection of the public interest, as well as in the
17 promotion and development of nuclear energy and the
18 desire to streamline the process and make relicensing
19 simpler and easier and better for everybody.

20 We fully embrace those goals and
21 aspirations on the part of the NRC, Entergy, DOE and
22 everyone in the country that wants to see a reasonably
23 priced Entergy supply available in an area of the
24 country that really particularly needs it.

25 We have to look first at our citizenry and

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1 the economy here and I think you can see the
2 tremendous reliance there is on the tourism economy to
3 make sure that's taken into account. When our
4 population doubles over the week of July 4th, that
5 tells you something. And throughout the summer, it's
6 much higher than just an average analysis. Three
7 months out of the year, it's extremely high, with more
8 congestion on the roads. It's not just people coming
9 and staying, it's activity.

10 We are asking the NRC and Entergy to do
11 their utmost to provide the protection, all that is
12 available under the relicensing process or in the
13 context of the broader responsibilities of the NRC and
14 the reactor oversight process, all these issues that
15 have been raised here, to direct their attention to
16 the unique circumstances of Plymouth and surrounding
17 area. It's a smaller area, but it's a very important
18 area in many, many ways and we just ask your
19 assistance in that regard and very much appreciate the
20 opportunity to have participated in the role that we
21 have as a local community most affected by the
22 relicensing.

23 Thank you to the panel for their gracious
24 hospitality too.

25 CHAIR YOUNG: Thank you. Before we go

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1 back to you, something that Ms. Hollis said just
2 triggered another thing that I wanted to ask both
3 Entergy and the Staff and that is when you're talking
4 about averaging, obviously if you look at say a year's
5 time, whether you're looking at whether or more -- my
6 question get more to population evacuation times and
7 economic questions more, I guess, because if you look
8 at a locality where the difference between a three-
9 month period in the summer may be significantly
10 different than a period in the winter such that you
11 don't have the high and low points closer to the
12 average as you might in other communities.

13 I'm assuming that there's some kind of --
14 some part of the analysis takes into account that
15 there might not be that many days during the year that
16 would be that close to the average number and that
17 there might be a significant number of days during the
18 year that would be closer to the high numbers, such
19 that the averaging might not present as representative
20 a picture or -- I'm not sure I'm using the right words
21 from a statistical point of view, but does your
22 analysis take that into account?

23 I see you've gotten a note there.

24 MR. LEWIS: First of all, the evacuation
25 time estimates consider the different populations at

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1 different times of the year, so when they're looking
2 at an evacuation time estimate in the summer they're
3 considering the larger transient population in
4 estimating how long it takes to evacuate that area.
5 And for purposes of using the results of the SAMA
6 analysis, we're assuming that the entire 10-mile
7 evacuation zone is evacuated.

8 But the reason that we run sensitivity
9 analyses is exactly for the reason that you state when
10 you take an average, perhaps a different time of year
11 where it might be different from the average and it
12 may be significant, so you run a bad weather scenario
13 for sensitivity analysis. As I said we only got a two
14 percent difference in the results and they needed to
15 double to make a difference, so we were very satisfied
16 that we didn't have to sharpen our pencil more on the
17 running evacuation time estimate scenarios for the
18 SAMA analysis.

19 CHAIR YOUNG: Are we thinking that that
20 might be what they addressed, but I just wanted to
21 make sure that that was addressed.

22 JUDGE TRIKOUNOS: One of the things that
23 we have to do is clearly -- I heard July 4th
24 mentioned, but what if this happened on July 4th and
25 assuming somebody dealt with that, somebody else could

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1 turn around and say wait a minute, Christmas Day is
2 probably worse than July 4th. Somebody else could
3 turn around and say what about on Christmas Day it
4 snows, we have a snowstorm.

5 You could carry this -- from the point of
6 view of practicality, I was just trying to understand
7 how an Applicant would respond to any possible
8 question that could come along these lines and that is
9 -- and I think you can understand it's a practical
10 consideration.

11 But on the other hand, if there's some
12 error in the analysis, then clearly that's a
13 significant fact. But there is a logic, I think, for
14 taking the average in that regard, but so I think
15 that's something we've got to deal with in dealing
16 with these contentions, these types of issues.

17 MS. HOLLIS: Your Honor, May I respond?
18 I think it's a matter of degree and the uniqueness of
19 the circumstance that we happen to have in Plymouth
20 and that is that in the summer, this a tourist town.
21 It exists in large part on tourism. It's not a
22 manufacturing town. We don't have Ford Motor Company.
23 We have, to a very large degree, an economy which is
24 reliant on tourism and the tourism peaks over the
25 period of the summer and in particular has a super

1 peak on and around the Independence Day and also
2 probably -- it would probably be similar on Memorial
3 Day and Labor Day. I would expect that those three
4 -- weekends would probably be the height of the activity.

5 And those are the types of issues that we
6 just want to be sure that the NRC is aware of. It is
7 taking into account and that Entergy is factoring into
8 its studies in a way which is updated, which
9 recognizes the pre-existing level of traffic and
10 congestion and population which has changed since
11 1998, which has gone up, and also domestic tourism has
12 increased dramatically since 1998 for a variety of
13 reasons.

14 So those are the types of issues we just
15 want to get out and make sure that the NRC is aware of
16 and I'm just here to convey those today in a way that
17 at least brings it home.

18 Thank you, Your Honor.

19 MS. UTTAL: Judge, not to beat this too
20 much to death, but the Staff is aware of these issues
21 and I've been told that the sensitivity studies that
22 the Staff has seen show that if you factor in the
23 evacuation time differences of the meteorological
24 using different years or something like that, that it
25 only changes the bottom line by a couple of percentage

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1 points. So it's not a big difference.

2 CHAIR YOUNG: We'll let you have the last
3 word.

4 MS. BARTLETT: First of all, I don't think
5 Petitioners are really quibbling too much over what
6 days of the year are taken into account and that sort
7 of thing. Some of the major assumptions are what
8 we've challenged in our contention. One of those is
9 the shadow evacuation which I don't think counsel for
10 NRC or Entergy has addressed today.

11 But could I also say in response to your
12 questions to the Staff where they said they're
13 reviewing the SAMA analyses and in particular, they're
14 going to look to see whether they conform with what
15 was done at other plants. This is something that
16 concerns us.

17 We are not challenging NRC regulations at
18 all here. But we may be challenging some of these
19 practices that are accepted by the staff when they
20 review Entergy's SAMAs and if I could just quote from
21 the actual regulatory handbook that's used in doing
22 these, it says "formal methods cannot completely remove
23 subjectivity, guarantee that all factors affecting an
24 issue are considered, produced unambiguous results in
25 the face of closely valued alternatives and/or large

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1 uncertainties, or be used without critical appraisal
2 of results. To use a decision analysis method as a
3 blackbox decision maker is both wrong and dangerous."
4 This is NUREG 0184.

5 I think that's what we're getting to here
6 is that Entergy has a standard way of performing these
7 things and we're questioning some of those basic
8 assumptions. And I think they should be questioning
9 them.

10 We've submitted plenty of information to
11 back up some of the input data which we believe is
12 going to lead to an erroneous result. We can't prove
13 that it does, but we really believe that the analysis
14 needs to be done properly.

15 CHAIR YOUNG: I have a couple of
16 questions. Let me come back to you.

17 Could you just address the shadow
18 evacuation quickly? Do the sensitivity analyses or do
19 the analyses take into account what's called the
20 shadow evacuation, the additional people who I guess
21 may not be in the formal defined area, but nonetheless
22 evacuate, that phenomenon?

23 MS. UTTAL: It's not generally done and at
24 least the Staff that's here today has not seen it done
25 for other applications.

1 CHAIR YOUNG: Do you dispute that it would
2 occur and have an effect?

3 MS. UTTAL: You know, it might occur. I
4 don't --

5 MR. LEWIS: Judge, where it did occur was
6 at Three Mile Island, but that was in the absence of
7 any pre-established plan and pre-established
8 communication program and the main recommendation of
9 one of the studies that the Pilgrim Watch cited from
10 this Three Mile Island experience was what you really
11 need is a public education program so that when you
12 have announcements, emergency planning announcements,
13 people understand what it means, they understand what
14 they're meant to do. I would simply say that the
15 experience at Three Mile Island is really sua generis.
16 It was a situation where there was no pre-existing
17 plan, no pre-existing public education, not very good
18 communication.

19 CHAIR YOUNG: Do you think that the public
20 education and communication has occurred here such
21 that that would avoid that? Is that what you're
22 saying?

23 MR. LEWIS: I believe it would. It is
24 definitely a part of our emergency, the emergency
25 planning that's performed. It's really by the state.

1 It's the state's outside emergency plan, but it
2 includes different forms of communication of what you
3 should do in the form of a -- in the event of an
4 accident. But it also includes much better
5 communications and decision making.

6 From my perspective, one of the biggest
7 problems in the response at Three Mile Island is the
8 information wasn't getting passed on to site
9 officials. They didn't know what was happening. They
10 were unable to provide useful information to the
11 public and there was very heightened fear. It's just
12 not a situation that you would expect with a program
13 that has an off-site emergency operations facility and
14 lines and communications and programs and protocols
15 and established program. I mean you would expect the
16 plan to operate the way it should.

17 Again, for purposes of doing a reasonable
18 SAMA analysis, I think it's reasonable to assume that
19 the plan that's been approved by the NRC, approved by
20 FEMA is being implemented by the state is your
21 baseline reasonable assumption. And that is what
22 we've used.

23 JUDGE TRIKOUNOS: I would like to
24 understand a little bit more about shadow evacuation
25 as well.

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1 At Three Mile Island, if you turned
2 around, Middletown was empty. Harrisburg was empty
3 before even an evacuation order was given because
4 people got frightened and they called people. But I
5 view that as a positive thing rather than a negative
6 thing since the people are gone prior to an evacuation
7 call.

8 But you view it as a negative thing and
9 I'd like to understand that the significance of it is
10 that people in their communities beyond this community
11 travel roads?

12 MS. BARTLETT: That's exactly right. I
13 think and I'm not the expert on this, but I think the
14 area that would be told to evacuate according to the
15 current plans is very small, but what would actually
16 happen, particularly in a nuclear accident, this isn't
17 a hurricane where people decide to stay and look at
18 the waves. People would go and they'd hit Route 3 and
19 all of the feeder roads to Route 3 and we'd all be
20 sitting in traffic and I just don't know how you could
21 come up with a conservative time of six hours for that
22 full evacuation to be carried out.

23 I have to let my co-person talk at this
24 point.

25 MS. LAMBERT: Yes. Thank you for the

1 opportunity. The shadow evacuation research has been
2 done very recently. Surveys done around New York,
3 surveys done around Seabrook, asking telephone
4 surveys, people outside the immediate emergency
5 planning zone, what they would do when they heard
6 there was an accident. And the overwhelming response
7 was we're out of here. We're going to hit the road
8 because there's a recognized fear in the public of
9 radiation and appreciation that it is different than
10 a regular storm.

11 Therefore, that's why it becomes so
12 important on your input and also let me add of the
13 rapid, of the technology allowing today for very rapid
14 communication. People have cell phones. Teachers in
15 Plymouth, you know, when they hear there's a problem
16 they'll be calling their kids in Duxbury who will be
17 calling a husband in Norwell, etcetera, etcetera.

18 So therefore, it's very important to
19 recognize the reality that people from a larger area
20 are going to hit the road so then what is going to
21 happen? Our emergency management director in Duxbury
22 has said no one is going anywhere, as far as he can
23 tell. If you look, which we have in I believe in our
24 appendices in talking about demographic data, we gave
25 an example of the population projections in the towns

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1 that would be along our evacuation route, our being --
2 I'm from Duxbury -- that what towns we would then be
3 going through to get out, our only way out and what
4 the population projection is because that's what you
5 have to look at.

6 And the important point of evacuation
7 delay times and evacuation speed times is the
8 recognition in NUREG 0654 Supplement 3 that stated
9 that shadow training was not an option to protect
10 health unless there was a very -- a puff of short
11 duration.

12 So when we're looking at cost, we're
13 looking at consequences in health and in property,
14 obviously, but that is dependent upon how quickly
15 people can get away. You see? And so therefore the
16 reliance and you've been given inaccurate information,
17 by the way. What the licensee used was the KLD
18 evaluation time estimates. They based theirs on 1997.
19 There is a more recent one that we looked at in 2004
20 and we would have expected them too.

21 On page 1-8 through 1-11 on the 2004 KLD
22 estimates, they indicate what the differences are
23 between the two. Number one --

24 CHAIR YOUNG: Do we -- pardon me -- do we
25 have that document?

1 MS. LAMBERT: I don't know, but I'll give
2 it to you if you want it.

3 CHAIR YOUNG: Okay, why don't you submit
4 that after -- and to all the parties.

5 MS. LAMBERT: Right, and number two is
6 they're relying upon and this has been the problem.
7 Their input data is based on source material, but the
8 source material itself has false assumptions. For
9 example, for the evacuation time estimates they do not
10 consider shadow evacuation in the earlier or the
11 later. They do not consider, they state this special
12 events. We have heard how July 4th is special. That
13 is not figured. They do not consider, when they look
14 at summer, for example, they look at midweek, midday.
15 Well, that's not realistic because it's the weekends
16 or the end of the day that you're going to have more
17 people at the beach because people are working these
18 days.

19 So when you look at carefully what the
20 material is based upon that feeds their input data,
21 you see why it's only six hours or there's not much
22 difference because it's inaccurate material to begin
23 with.

24 Meteorological data is very, very
25 important. That's why we spent a lot of time

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1 indicating why the straight line, Gaussian plume model
2 is inappropriate for our coastal community. There has
3 been site-specific studies done by Harvard
4 meteorologists in this area indicating that the winds
5 don't blow in a straight line. So therefore, when you
6 consider impact, you cannot consider there's going to
7 be a wedge. You've got to consider there is going to
8 be a circular, complex impact which is going to
9 encompass more of the population. This is what we're
10 getting at.

11 CHAIR YOUNG: I have a question.

12 MS. LAMBERT: And thank you for the
13 opportunity. I know she's going to kill me.

14 (Laughter.)

15 CHAIR YOUNG: The main objection that I
16 hear being raised to some of the suggested different
17 inputs that you've included in your contention is that
18 you haven't shown that it would make a difference.
19 Now one thing you mentioned in your discussion of the
20 evacuation times, you -- in raising the shadow
21 evacuation and mentioning the six-hour time that you
22 find would be unreasonable, I'm sort of balancing in
23 my mind the need for some level of specificity in the
24 basis and that's how I am understanding the objection
25 that you haven't shown any specific difference in the

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1 outcome of the analysis.

2 On the other hand, if you look at the
3 comparison between the people -- wrong footnote. But
4 anyway, I believe the footnote about the shadow
5 evacuation indicated that the difference between the
6 number expected to evacuate and the number who did
7 evacuate was fairly large and you have raised a
8 question about the six hours. There's case law that
9 says have you provided enough to show that further
10 inquiry is warranted.

11 So I guess just to end the discussion on
12 this particular contention, I would ask you to address
13 and Ms. Hollis, if you like, the issue of what
14 difference would changing inputs make and what have
15 you included in your contention on that. And also
16 hear from the Staff and Entergy, sort of applying the
17 rule of reason that I discussed before. And the
18 references to the shadow evacuation which, if it
19 occurs, seems like that would be a fairly large
20 difference. And the references to the six hours being
21 unreasonable just from a standpoint of the subjective
22 knowledge, I think -- I can't remember the exact
23 words, but the language that you read from the
24 handbook or guide, if you could address just that sort
25 of practical reason-based aspect of it.

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1 So I've asked two questions that I'd like
2 to hear both sides of in terms of the impact and how
3 that -- and -- whether it's been shown that there's
4 enough to warrant further inquiry standard for
5 admitting a contention. I think it would be helpful
6 to close on this contention and those two sides of
7 that coin.

8 JUDGE TRIKOUNOS: Yes, and I would just
9 like to add one thing to that. This other aspect of
10 shadow evacuation that I mentioned that happened
11 earlier, you know, it seems to me that that's another
12 factor in which people in the 10-mile EPC, perhaps a
13 third or a quarter or half of them or all of them
14 would be gone even before an evacuation order is given
15 just on the basis of a general emergency or something
16 like that. And I don't know what the EPIP, Emergency
17 Plan Implementing Procedures are, but if that isn't an
18 issue, if you could raise that as well? I mean
19 discuss that as well.

20 MS. BARTLETT: Well, frankly, I don't have
21 a lot of experience with the idea that there's that
22 kind of rosy outlook for the evacuation, that if
23 people got the word earlier the streets would be
24 clearer. I mean I don't think that happened.
25 Hurricane Katrina, for example, people were told for

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1 days to leave and that didn't cut down on the traffic
2 on the road.

3 JUDGE TRIKOUNOS: I just want to make sure
4 we cover both sides.

5 MS. BARTLETT: I understand that and I
6 guess to put it in terms of numbers, Entergy has
7 submitted that the longest it would take for word to
8 be given is two hours, for word -- the evacuation
9 delay time is two hours, so I don't think that's
10 buying you that much time on Route 3, if we're talking
11 about all of the towns in the area getting word by
12 cell phone.

13 Am I addressing the --

14 MS. LAMBERT: You're missing a point. In
15 a general emergency, the notification siren is
16 supposed to be sounded. People -- and that's when
17 radiation -- we're talking about severe accident, so
18 it doesn't even matter, the point being that if the
19 public hears the sirens or hears there's been an
20 accident and the protective action call is for
21 evacuation, whether it is or not, word is going to
22 spread like wildfire and it's going to be a stampede.
23 So you're going to have the same situation. It's not
24 going to be like Three Mile Island where no one
25 admitted or no one had a fix because the monitors were

1 blown out, etcetera, what was happening, so you had a
2 sort of a prolonged situation.

3 What you will have here with the
4 sensitivity of the population as soon as the
5 notification occurs, you will have the reaction. It's
6 not going to be the siren goes off and a voice message
7 well, we think we might be having a problem. So I
8 don't think what we are posing is a realistic
9 scenario.

10 CHAIR YOUNG: Finish up on that, but also
11 the impacts, more generally of the various aspects
12 that you've raised. I wanted you to have a chance to
13 address that.

14 MS. BARTLETT: Right, well, I was going to
15 move on to that if this is the time.

16 To show that any of the issues that we've
17 raised would make a difference in the outcome of the
18 analysis is actually a huge burden, but we can talk
19 about it in general terms. As you noted, the
20 information we've given about shadow evacuation shows
21 orders of magnitude difference in the numbers used,
22 not the types of differences that they're using in the
23 sensitivity analyses, but really huge differences.
24 And so the response from Staff and Entergy that these
25 things only make a one or two percent difference, I'm

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1 not sure would hold if you change the assumptions and
2 included shadow evacuations.

3 The economic data I keep coming back to
4 mainly because it's expressed in terms of dollars and
5 it makes it easy to picture how the dollars are
6 different than what they're saying. If those numbers
7 were input into the program, I also can't say that
8 would make a difference, but it seems to me we're
9 talking many, many orders of magnitude difference from
10 what they're using which dealt mainly with
11 agricultural costs, condemning farms, paying top ut
12 people up in hotels. We're talking about years of no
13 tourists wanting to come to the area. And to me,
14 that's the kind of critical look after you've run your
15 program that you need to take when you start assessing
16 mitigation alternatives.

17 I don't believe I can prove number-wise
18 that these would make a difference. But certainly, if
19 we were admitted, we would get an expert who hopefully
20 would have access to what they need to crunch these
21 numbers and we could demonstrate that changing a few
22 assumptions would change the outcome for the SAMAs.

23 CHAIR YOUNG: You did mention the six-hour
24 time that you thought was unreasonable. Can you point
25 me to where you mentioned that and what would be the -

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1 - why you find that to be unreasonable, what you would
2 expect to be more reasonable, based on the information
3 that you have provided?

4 MS. BARTLETT: It's taken me two and a
5 half hours to get to Braintree on a bad Monday morning
6 without rain and without a nuclear accident. I can't
7 imagine if everyone were on the roads trying to get
8 out of the danger zone that it would take less than
9 six hours. Again, I haven't got that data for you.

10 MS. LAMBERT: Nobody can really have this
11 data because we haven't, thank God, had the situation
12 here. But you can see on summer weekends, traffic has
13 -- can come close to or exceed -- and there isn't a
14 nuclear accident.

15 MS. BARTLETT: And the reason that's
16 relevant is not that we think they should take 4th of
17 July as their standard, but that shadow evacuation
18 would dump all of the residences and all the nearby
19 towns on Route 3 and that would happen. That's not
20 worse case scenario, worse day of the year scenario.
21 That's human behavior.

22 MR. LEWIS: May I address some of this.
23 And then we'll let everyone have one last shot on
24 these more practical questions and then go on.

25 MR. LEWIS: Let me address the shadow

1 evacuation phenomena. There's two phenomena. One is
2 within the 10-mile zone, if you tell a particular
3 sector to evacuate, maybe sectors on either side will
4 evacuate also. That's one phenomena. In our
5 evacuation time estimates we, in fact, include that.
6 We assume if we tell a sector to evacuate, some of the
7 people in the adjacent sectors will too.

8 That's irrelevant though to the SAMA
9 analysis because we're assuming that the entire 10-
10 mile zone is evacuating. Beyond the 10-mile zone,
11 there's the second phenomena which is that perhaps
12 people in those outer lying communities also try to
13 evacuate and they clog the roads. The reason this is
14 not an issue is because that's recognized in the
15 emergency plan. The emergency plan establishes
16 evacuation routes and corridors to reception centers
17 and part of the implementation of the plan is the
18 immediate dispatch of traffic control teams to these
19 major roads so that people from outside the 10-mile
20 zone can't get onto these roads and clog them. And
21 the purpose of that specifically is to allow the rapid
22 egress from the 10-mile EPZ.

23 Again, it's the fact that we have a proper
24 functioning emergency plan that has these
25 considerations, has the public education, has the

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1 state resources lined up with a response plan that is
2 in place specifically to address these sort of
3 situations and if you look at what happened at Three
4 Mile Island, it's just apples and oranges.

5 They indicate -- people outside the 10-
6 mile zone, they also try to evacuate, but they don't
7 explain how they're going to get past these traffic
8 control points onto these major routes that block
9 people from leaving the 10-mile zone.

10 CHAIR YOUNG: Let me just interject. What
11 I was really wanting to get at was some sort of
12 practical aspect, some of the practical aspects and I
13 guess I'm not automatically buying the idea that if
14 you have a plan and if that plan includes having the
15 traffic control people go out to an area so that they
16 can control who goes on the road and who doesn't go on
17 the road, that that necessarily would work. They
18 would be dependent on getting the roads themselves
19 presumably unless they have helicopters, I guess or --
20 and I think we've seen how plans don't always work
21 according to everything that's anticipated.

22 MR. LEWIS: The traffic control people are
23 the local state police. This is a staff of employees
24 trying to drive out themselves.

25 CHAIR YOUNG: I know.

1 MR. LEWIS: This is people on the spot.

2 CHAIR YOUNG: Right. But I mean still, --
3 there have been differences pointed out with Katrina,
4 but I think that there were difficulties with the
5 people who were in charge being able to control and
6 direct traffic in that situation, so my point is you
7 just can't always count on -- you seem to be implying
8 that everything would work according to the plan and
9 that all the people who should be in place to control
10 things would be able to get to where they needed to be
11 and I'm not sure that that's --

12 MR. LEWIS: What I'm trying to argue --

13 CHAIR YOUNG: From a practical standpoint.
14 I'm not sure that that's always to be expected, right?

15 MR. LEWIS: I can't say it's always to be
16 expected. We have to do a reasonable SAMA analysis.
17 We have to look at reasonable accident scenario. I
18 think it's inherently reasonable to assume an accident
19 scenario that's consistent with the emergency plan.
20 The emergency plan is in place to take into account
21 these situations.

22 We do sensitivity analyses to account for
23 uncertainties, beyond the sensitivity analysis that we
24 do for evacuation time estimates. We also do a
25 bounding SAMA analysis where we multiplied the risk,

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1 I think by a factor of 1.6, almost doubled the risk to
2 account for uncertainties.

3 So there are uncertainties. We have a
4 baseline reasonable scenario and we assume that the
5 evacuation is working the way it's meant to be
6 working. We do a sensitivity analysis and show that
7 a bad weather scenario doesn't really make a big
8 result change and then we do a bounding analysis where
9 we essentially double the risk and show things still
10 don't matter.

11 There was one statement by the way that we
12 only look at a summer, midweek scenario. That's
13 absolutely wrong. Our evacuation time estimates look
14 at a whole range of scenarios including a summer
15 weekend, midday rain scenario, where a sudden rain
16 occurs with the beach population at capacity, current
17 with an accident and we even do a variation of that
18 with heavy traffic on Route 3 north bound. So there's
19 10 different scenarios and one is weekend, beach is
20 absolutely full, sudden rain and Route 3 is lousy
21 traffic.

22 JUDGE TRIKOUNOS: All those scenarios are
23 consistent with the emergency plan?

24 MR. LEWIS: These are all the evacuation
25 time estimates that are -- this is part of the

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1 emergency plan, yes.

2 I may exceed my knowledge, but basically
3 if there is an accident, then you have to make a
4 protective action recommendation and you look at the
5 situation and the wind and the situation and you make
6 your decision and I believe that evacuation time
7 estimates are a factor in what is the right action to
8 take.

9 That's actually -- that's what happens in
10 a real emergency. What we're trying to do here is say
11 what's the reasonable consequences if you have this
12 severe, beyond design basis accident. We're not here
13 trying to actually manage a real accident at a real
14 point in time.

15 JUDGE TRIKOUNOS: The problem that you
16 need to understand, we have certain constraints, so
17 we're trying to get information to understand how to
18 do the best thing under the constraints.

19 For example, if one were to do the
20 analysis ignoring the established emergency plan, and
21 then there were an accident in which case the result
22 of ignoring the emergency plan caused more problems,
23 you can bet there would be tremendous finger pointing
24 of why didn't you do it according to the emergency
25 plan?n.

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1 So the fact that there is an existing
2 emergency plan is not a small thing.

3 MS. BARTLETT: We agree that what Entergy
4 needs to do is what they've done and then they need to
5 look at it critically as was described in that NUREG
6 0184, not to just sit back and say we've done the
7 whole thing. It's reasonable numbers we're getting
8 out.

9 I don't believe that Pilgrim Watch is
10 quibbling so much over the emergency plan and whether
11 it's midweek, midsummer, that kind of thing. There
12 are some basic assumptions that we know that they know
13 that they haven't taken into account and some of them
14 are published limitations of the software they're
15 using that they could easily account for.

16 JUDGE TRIKOUNOS: With respect to these
17 things that we're hearing regarding multipliers of 1.6
18 and that sort of thing for uncertainty, you haven't
19 said anything regarding how, whether or not some of
20 these suggestions you're making would fall within that
21 or not.

22 MS. BARTLETT: Right.

23 JUDGE TRIKOUNOS: Is there anything to say
24 there?

25 MS. BARTLETT: Without an expert, I don't

1 think we can say whether they'd be greater than 1.6 or
2 not. We've brought forward some things that are
3 orders of magnitude, different from what was input.
4 And as such, we've alleged many deficiencies in the
5 environmental report, the way this SAMA analysis has
6 been done. And we welcome the opportunity to be given
7 a hearing and have a chance to hire an expert to help
8 us get some actual numbers and then we will try to
9 prove our case.

10 MS. UTTAL: Judge, if I might? Are you
11 done?

12 MS. BARTLETT: Yes.

13 MS. UTTAL: I don't think that that is
14 sufficient under our contention pleading rules. They
15 have to come forward with some facts or some expert
16 opinion that forms a basis for the contention and it's
17 the Staff's position that they have not come forward
18 with enough and they can't show enough to show that
19 there is something wrong with the analysis that is
20 done.

21 Just to address Judge Young's question is
22 what the Staff has found regarding evacuation times is
23 that they don't drive the result. They're kind of a
24 secondary fact and they don't affect the bottom line
25 other than a couple of percent and that includes the

1 shadow evacuation.

2 That's all I have.

3 CHAIR YOUNG: Anything further on
4 Contention 3?

5 All right, we have one more contention to
6 look at. I don't know if people are going to want a
7 short break, but one thing that occurs to me before we
8 get started on that is I think it's clear that you
9 cannot challenge NRC rules in a contention so if we
10 could focus in that discussion on what is in the
11 contention apart from any challenge of the current
12 dose limit set in the regulations. I think you're
13 arguing in your reply that the contention does make
14 other arguments that the off-site radiological impacts
15 are greater than has been assumed and you base that on
16 some of the studies that you supply.

17 So if we could all agree that we will not
18 consider the contention insofar as it challenges the
19 current NRC regulatory dose limits and focus on what
20 remains of that. The discussion on that should -- I
21 think we should be able to focus that a little bit
22 more than we have some of the others, it seems to me
23 anyway.

24 Do people want a few minutes before we
25 finish up with the discussion of this last Contention

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1 5?

2 No?

3 MR. LEWIS: Yes, please.

4 CHAIR YOUNG: Yes. Okay. Five minutes,
5 come back at 1.

6 (Off the record.)

7 CHAIR YOUNG: All right. Before we start
8 on Contention 5, Ms. Uttal had something she wanted to
9 correct.

10 MS. UTTAL: One of the last things I said
11 was that when we looked at evacuation times, we saw
12 that it didn't affect the bottom line and I said
13 including shadow evacuation. It doesn't include
14 shadow evacuation because as I said earlier --

15 CHAIR YOUNG: It does not?

16 MS. UTTAL: It does not. The Staff
17 doesn't look at shadow evacuation because it has never
18 really raised the bottom line more than a percent or
19 two. They don't normally look at it.

20 JUDGE COLE: And they consider shadow
21 evacuation, those populations outside the 10-mile
22 zone?

23 MS. UTTAL: If they use the evacuation
24 time estimates from the emergency plan, the Staff
25 accepts that. We assume that they've considered all

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1 factors.

2 JUDGE TRIKOUNOS: And the emergency plan
3 includes interdiction of downstream entrance to the
4 freeway?

5 MS. UTTAL: Whatever their plan has in it.
6 I don't know the specifics.

7 CHAIR YOUNG: All right, Ms. Bartlett on
8 Contention 5.

9 MS. BARTLETT: Our final contention is
10 that another 20 years of operation at Pilgrim may
11 result in greater off-site radiological impacts on
12 human health than was previously known.

13 Although we realize that off-site
14 radiological impacts are a Category 1 issue in the NRC
15 regulations, we've brought forward new and significant
16 information that demonstrates that under NEPA they
17 should be addressed in a site-specific way for this
18 plant.

19 Pilgrim releases radiation as part of its
20 normal operations and has done so for the past 35
21 years. We bring forward information that demonstrates
22 an additional 20 years will be harmful to public
23 health. We've submitted studies that show radiation-
24 linked diseases have been documented in the
25 communities around Pilgrim. This fact and projected

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1 demographic data indicate that the population will be
2 at an increased risk if another 20 years of operations
3 are approved.

4 I'll skip forward a little bit, so that I
5 don't repeat everything.

6 The nuclear plant was originally sited in
7 Plymouth because it was a sparsely populated area.
8 It's now densely populated and will experience another
9 20 percent increase in population before the license
10 extension period ends. One in three of these
11 residents will be over the age of 55, an age that we
12 have shown is more sensitive to low levels of ionizing
13 radiation than the population at large.

14 In addition, there have been documented
15 releases from Pilgrim in the past of radioisotopes
16 that have long half lives and thus will bio-accumulate
17 in the areas around the plant.

18 The past 35 years of releases from Pilgrim
19 include substances that will remain active in the
20 local environment for the foreseeable future and
21 should be taken into account when assessing the
22 impacts of the next 20 years.

23 The Council on Environmental Quality
24 Regulations define accumulative impact as the impact
25 on the environment which results from the incremental

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1 impact of the action when added to other past, present
2 and reasonably foreseeable future actions.

3 Cumulative impacts can result from
4 individually minor, but collectively significant
5 actions taking place over a period of time. Pilgrim
6 Watch has demonstrated that the communities around
7 Pilgrim have experienced negative impacts from the
8 past operations of the plant and because of these past
9 practices, the likely off-site radiological impacts of
10 the next 20 years now need to be reviewed in the
11 environmental impact statement before the license is
12 renewed.

13 CHAIR YOUNG: And what you're arguing is
14 that the impacts are the result of greater releases
15 that would violate the NRC dose limits?

16 MS. BARTLETT: There have been documented
17 releases that were above and beyond what's allowed to
18 be released by Entergy's predecessor, I believe.

19 CHAIR YOUNG: Mr. Lewis?

20 MR. LEWIS: Obviously, I'm not going to
21 repeat the new and significant information argument
22 again. And our position remains that there's a need
23 for a waiver.

24 The only document that they refer to is
25 this Southeastern Massachusetts Health Study for the

1 proposition that there's an increased risk of leukemia
2 and in their reply, Pilgrim Watch cites a 1992 review
3 of that study by Mssrs. Hoffman, Lyon, Mass, Pastitti,
4 Sander and Trakopolis for the proposition that this
5 study can't be discounted.

6 Since they're relying on that document to
7 say this is a credible study, I think you should also
8 be aware that that document says the leukemia
9 mortality rates for this area have remained close to
10 the state average throughout the period. In other
11 words, this study, when they looked at it, concluded
12 that there was no greater leukemia incidents in the
13 vicinity than is in the national area. In fact,
14 there's been two other peer review studies --

15 CHAIR YOUNG: First you said state and
16 then you said national, did you mean --

17 MR. LEWIS: Comparing -- what it says is
18 that the leukemia mortality rate for this area have
19 remained close to the state average throughout the
20 period, yes, I'm sorry. This is comparing it to the
21 state average.

22 There have been two other peer-review
23 studies. One by Battelle and they've both concluded
24 that the leukemia rate in the vicinity of the plant
25 was in line with the normal rate, so you don't need to

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1 go to that. You can look at the document that the
2 Petitioners cite for the proposition that their study
3 is credible and the document that they cite on its own
4 face says there is no greater incidents of leukemia in
5 the vicinity of the plant. And it's a well-
6 established proposition that you can look at the
7 documents that Petitioner cites to determine whether
8 they provide a basis for the contention.

9 In the Vermont Yankee case LBP 96-2, 43
10 NRC 61 at page 64 is a good example where a Board --
11 actually, this was a contention that alleged that you
12 had to look at another accident scenario under NEPA
13 and offered some documents and the Board looked at the
14 accidents and said when somebody gives us a document
15 as a basis we can look at that document on its face
16 and determine whether it provides the basis. All I'm
17 suggesting is since they cited this peer-review study
18 as indicating their study is significant, if you look
19 at it, it belies that claim.

20 It's not new, certainly. It's -- the
21 original study was '87, I believe. It certainly
22 predated the GEIs, but it's also not significant.

23 CHAIR YOUNG: Ms. Uttal?

24 MR. WEDEWER: I'll just briefly summarize
25 her comments, Your Honor.

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1 We also actually looked at that same study
2 which calls into concern as well. This seems to place
3 serious doubt on the Southeast Massachusetts Health
4 Study and I would add as well that in spite of
5 Petitioners' assertion that study was actually co-
6 sponsored by the state, along with the previous
7 licensee which I think was Boston Edison.

8 CHAIR YOUNG: Who was that?

9 MR. WEDEWER: Boston Edison who was the
10 previous licensee.

11 Just one other comment because I think
12 this has at least some bearing on the new and
13 significant prong was the BEIR VII because you see
14 that mentioned quite a bit. And we reviewed the
15 sections that Pilgrim Watch cited which was Chapter 8
16 which referred to occupational studies. And there's
17 a caution at the very end of that chapter that you can
18 see for yourself that the Committee recommended not
19 using these to apply to the larger public sector
20 because these occupational studies were all based on
21 an amalgamation that considered a wide range when you
22 deal with the small population.

23 So that mischaracterizes really what BEIR
24 VII says. I think the other proposition that you see
25 kind of running through their pleading is that the

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1 linear no threshold dose response is somehow a new
2 phenomena and you can easily trace it back to '91 when
3 the present Part 20 was published. You can trace it
4 back to BEIR V.

5 And there's an assertion, I believe it's
6 on page 87 or 88 of their pleading, that the
7 Commission at some time in the past thought that some
8 small amounts were not harmful at all and that simply
9 is not true. So at bottom, there's nothing in BEIR
10 VII that struck us as either new or significant and
11 it's been completely consistent with what's been known
12 in the past.

13 CHAIR YOUNG: One thing that Mr. Lewis
14 said that raised one question I wanted to ask you.
15 This contention is distinguishable from the
16 Massachusetts AG contention, Contention 4, in that
17 you're talking about site-specific issues here which
18 would presumably meet the standard for a waiver
19 request. Have you considered making a waiver request
20 and are you -- I know you are probably arguing based
21 on the other parts of the argument relating to the
22 Massachusetts contention and your Contention 4, but
23 the waiver request part would be different than this
24 one.

25 MS. BARTLETT: Right. We believe we can

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1 bring this contention forward based on NEPA, but we
2 are considering filing a waiver request. We have an
3 expert who could give us an affidavit to support such
4 a request.

5 CHAIR. YOUNG: Okay. Anything further on
6 this contention?

7 MS. LAMBERT: Thank you for the
8 opportunity to say something. The importance of this,
9 the information that we cited that BEIR VII is
10 important to us because although the mortality, what
11 BEIR VII said on cancer deaths is very much the same
12 as the previous BEIR report, there is a very large
13 difference in cancer incidents which is important if
14 you have cancer. It's not just that you're going to
15 die, but if you have cancer and BEIR VII states that
16 there is a three times greater likelihood than they
17 thought in the previous BEIR report of getting cancer.

18 And they also draw a significant
19 distinction in the later report of worker exposure.
20 But I think it's inappropriate as was done in
21 Entergy's response is to say well, BEIR VII really
22 doesn't provide new information because that is very
23 much new and important information.

24 As far as the Southeastern Massachusetts
25 Health --

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1 CHAIR YOUNG: Let me just stop you there.
2 The new information that -- I presume the same amounts
3 of radiation would cause the greater incidence of
4 cancer. How would that relate to their being more
5 off-site releases because it seems like it could be
6 said in response to that that would not of itself
7 suggest that there was a greater release, but just
8 simply that the -- that that would go more to the
9 argument that it might be the kind of thing you'd
10 submit in a rulemaking petition that based on this new
11 information that the same amounts of radiation would
12 cause greater incidents that you could argue. You
13 want to change the dose limits, but I'm not sure how
14 that would suggest that there would be greater
15 releases.

16 MS. LAMBERT: I think what we're saying is
17 there's a composite here. The population -- our
18 assumption, our theory, if you will, is that the
19 population for a variety of reasons will be at a
20 greater risk from off-site exposure and this would be
21 one reason and we are saying also that this is a
22 particularly sensitive population group, a damaged
23 one, if you will.

24 The Southeastern Massachusetts Health
25 Study at page 3 in the introduction stated "the major

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1 findings of this study were individuals with the
2 highest potential for exposure to Pilgrim emissions,
3 i.e., those who lived and/or worked the longest and
4 closest to the plant had almost four times the risk of
5 leukemia as compared to those having the lowest
6 potential for exposure, i.e., those who lived and/or
7 worked the least amount of time and farthest from the
8 plant."

9 We found that significant in the community
10 and also the fact that even though for political
11 reasons, the implicated industry was allowed to have
12 a second peer-review panel appointed, half by
13 themselves and the other half approved by themselves,
14 that second peer-review panel could find nothing wrong
15 with the methodology to throw that study out.

16 Then, as our expert, or agreed expert, has
17 pointed out to us, he was the director of -- founder
18 and former director of the Massachusetts Cancer
19 Registry. He has reviewed the cancer registry for us
20 because unfortunately political will and available
21 monies has not allowed for more case-controlled
22 studies as had been recommended by the Southeastern
23 Massachusetts Health Study and promised to us. Hence,
24 we have small pictures which indicate the footprints
25 of radiation disease continuing in our area. Some

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1 statistically significant, some others at different
2 years elevated. Those being leukemia. Those being
3 thyroid cancer. These are radiation-linked disease.

4 More recently, because it takes longer
5 from exposure for them to cook, prostrate cancer, and
6 multiple myeloma. So because there have not been
7 large-scale case-controlled epidemiology studies,
8 doesn't mean there is not -- there are not -- there is
9 not evidence of the footprints of disease here.

10 Then you add the demographic changes of a
11 larger population, so therefore more to be affected
12 and an older population, because as has been shown in
13 many studies that we cited, those on both ends of the
14 age spectrum, the very young and the very old are most
15 susceptible to damage. And those of us like myself,
16 as an example, who have lived here a long time, who
17 have been eating the vegetables and this and that and
18 knowing that radionuclides in the environment
19 bioaccumulate and knowing at the same time and that's
20 why we included in our contention an analysis of the
21 environmental monitoring program that exists and what
22 the deficiencies of this program are, that we are, I
23 think, have demonstrated enough, we don't have to
24 prove it, but demonstrated enough that there's
25 something that should be brought forward.

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1 This is what we care about, not the
2 architecture of the plant. What we care about is the
3 public safety and health.

4 CHAIR YOUNG: I guess my main concern and
5 question here is that these types of things would be
6 much more relevant in a rulemaking petition asking for
7 a change in the rules because everything, in order to
8 make -- let's say you get beyond the new and
9 significant information, everything needs somehow to
10 be tied to some facts that would be connected to
11 greater releases that would, in fact, violate the dose
12 limits.

13 A lot of what you're saying would go to
14 your argument that appears to be included in the
15 contention which we were going to sort of put off the
16 table which is that you're saying that the -- this new
17 information may suggest that the current dose limits
18 are not as stringent as you would say they need to be.
19 But the key that would tie this into an admissible
20 issue would be something that would connect it to
21 releases that would violate the limits, I think in
22 order to avoid the challenge to a regulation argument.

23 MS. BARTLETT: Well, I think we were
24 arguing that 20 more years of allowable releases added
25 to 40 years of some allowable, some not allowable,

1 therefore a population that's already got problems, is
2 an issue that should be reviewed before relicensing is
3 granted.

4 CHAIR YOUNG: Well, now if you say
5 allowable releases, then --

6 MS. BARTLETT: I'm not saying that the
7 releases aren't allowable or that the doses have been
8 exceeded. I'm saying that if you added those to the
9 past 40 years, some of them not allowable doses.

10 MS. LAMBERT: Excuse me. I'd add another
11 point that was brought forward in the public sector
12 last night, that the Town of Duxbury and its vote on
13 whether to -- what conditions that they would approve
14 or disapprove for relicensing, one important one and
15 also brought forward was that the monitoring be
16 required to be improved and that there be
17 accountability by having it being computerized and
18 connected to various state and local agencies. So
19 it's accountability for what is being released.

20 CHAIR YOUNG: By asking for improved
21 monitoring, I think there would still need to be some
22 showing that there would be a violation of the limits.
23 If it's -- and I think clearly part of the concern in
24 the original contention was that the limits may not be
25 sufficient, so that's why I was asking. Just focus on

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1 the part that would not constitute a challenge to the
2 current limits. So I guess I'm not seeing how it
3 would not be a challenge to the rule if all you're
4 challenging is releases that would be allowable during
5 the term of the --

6 MS. BARTLETT: Even if we've demonstrated
7 that the population is more vulnerable because of past
8 practices, is that not relevant?

9 CHAIR YOUNG: I guess what I'm wanting to
10 hear, if there's something that would not be a
11 challenge to the rule is how the dose limit rules
12 would be violated. Maybe I'm missing something in
13 your argument, but if you're not alleging that all the
14 information together shows that there could be
15 violations of the rules as a result, then the argument
16 that the contention challenges the rule, in effect,
17 carries more weight.

18 MS. BARTLETT: I guess this is why we
19 would consider a request for a waiver, because we are
20 bringing forward plant-specific information that shows
21 an increased vulnerability to what our acceptable
22 doses at any other plant or other parts of the
23 industry --

24 CHAIR YOUNG: Then what you probably need
25 to think about and I'm not giving you advice, but

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1 you're not talking about from what I understand you to
2 be saying, you're not talking about just a request for
3 waiver from the GEIS rule. You're talking about a
4 request for waiver from the dose limit rules, it
5 sounds as though that's what you're saying.

6 MS. LAMBERT: I think one key word and one
7 key sentence that we used was nobody knows how much
8 radiation they released in the past, they're releasing
9 today or they're releasing in the future.

10 And I think it's very important,
11 particularly when we have seen the footprints of
12 radiation existing disease in our community that we
13 are given assurance being a sensitized population that
14 over the next 20 years of operations that we know how
15 much is coming out of there and the NRC knows how much
16 is coming out of there.

17 If you look at the location of their real-
18 time monitors that they put, you know, that we
19 discussed in a half ring at the edge of their property
20 and they call that a real-time system to ascertain
21 what's happening off-site, it's ridiculous. We know
22 the TLDs are not going to give us this type of
23 information. We know there is technology out there
24 where we could have a better fix on what is happening.
25 We know that the environmental testing that is done on

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1 a year to year basis for their radiological and
2 environmental monitoring reports, they're sampling
3 less each year. They send it to their own
4 laboratories to analyze the data and we've heard from
5 doctors at Boston University that he who looks at the
6 data and how you arrange it can determine the results.
7 And they send those reports to the NRC.

8 The data that is required to know what is
9 happening is currently not there. If there is
10 significant elevations which we have seen in some of
11 the environmental samples it is always due to
12 something else, to a test bomb that hits the indicator
13 station, not the control station. So I think there
14 can be an argument made that it's reasonable because
15 of the sensitivity of this population to provide
16 assurance that we know whether they are or are not
17 following the dose limits and regulations,
18 irrespective of whether the current dose limits are
19 appropriate, based on Biers VII, that's an argument
20 for another day and rule changes, as you know, take a
21 long time.

22 CHAIR YOUNG: What I'm really trying to
23 get you to focus on and maybe we can try to get there,
24 I'm looking back at Contention 1. In Contention 1,
25 you gave reasons for why you thought there could be

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1 more out there than the current assumptions are. And
2 you asked for consideration of greater monitoring as
3 a result of the various reasons that you gave for
4 thinking that more releases are going out there.

5 The types of issues that you're raising in
6 Contention 5, obviously are environmental as compared
7 to safety issues, but a great deal of what you're
8 arguing is the health information which suggests that
9 there's greater sensitivity to the same amount of
10 radiation. And when I asked you to focus earlier you
11 specifically said and I say you, the party, I think
12 Ms. Bartlett, you said you're concerned about
13 allowable releases in the future, in the license
14 renewal term.

15 And the reason I keep coming back to this
16 is unless there's something that you can hang your hat
17 on that provides some facts or enough to satisfy the
18 contention and admissibility rule, not only that
19 there's greater sensitivity than previously thought in
20 certain populations and so forth or greater incidents,
21 that there's actually greater releases that would
22 violate the rule. That's the thing that is sort of
23 key here and I'm going to let everyone speak to that,
24 but I wanted to give you a chance to address that
25 concern because that's the main thing that I see as

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1 being a concern here.

2 I don't want you to just go over all the
3 same stuff.

4 MS. BARTLETT: No, I'm not. I don't think
5 we can show that there are currently greater releases
6 than are allowed.

7 CHAIR YOUNG: Okay. Anything further on
8 this contention?

9 MR. LEWIS: I do, Judge Young, on just one
10 point. I believe I heard Ms. Lambert indicate that
11 BEIR VII showed that cancer incidents as opposed to
12 cancer mortality increased by three.

13 In their reply, Pilgrim Watch's reply to
14 our answer at page 31, an allegation was made that the
15 cancer incidents figures increased substantially by
16 approximately 35 percent. So I've heard two different
17 numbers and in neither case has there been any
18 citation or support. One of those has to be wrong,
19 but in fact, her comparison of the previous sentence
20 and in the reply at page 31, I believe was to BEIR V.
21 BEIR V didn't look at cancer incidents. It looked at
22 cancer fatality risks.

23 We've looked hard and see no basis for
24 either of these assertions in BEIR VII. There's no
25 citation whatsoever, no support offered. So this is

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1 coming out of the blue and I'm very skeptical of the
2 assertion.

3 CHAIR YOUNG: Do you want to respond to
4 that?

5 MS. BARTLETT: Well, correct me if I'm
6 wrong, I think what we were saying BEIR VII what was
7 new was that they did look at cancer incidents and
8 that those showed greater numbers than had been known
9 before.

10 BEIR V looked at cancer mortality.

11 MR. LEWIS: I don't know what the greater
12 numbers are before. I think that this sort of
13 traditional risk analysis in health physics has been
14 that --

15 MS. BARTLETT: Incidents risk figures
16 increased 35 percent.

17 MR. LEWIS: That's the assertion. I'm
18 saying there's no support. There's no reference to
19 what they're comparing against, no reference to BEIR
20 VII making this assertion and I think generally the
21 epidemiology has indicated that the cancer fatality
22 risk is about half of the cancer incident risk. I'm
23 not aware of anything in BEIR VII that changed that.

24 In fact, the BEIR VII numbers still show
25 that general relationship. And so this is an

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1 assertion and I've just heard it again made, but
2 there's no reference to any section of BEIR VII that
3 I can see that supports it and therefore I'm
4 suggesting that this doesn't provide any basis, just
5 this bold assertion that's coming out of thin air.

6 MR. WEDEWER: Maybe to add one point, Your
7 Honor, I think we noticed a related thing on page 87
8 of the Petitioners' original pleading. They had
9 referred to BEIR VII and the cancer cases expected in
10 100,000 persons and they had said exposed to 100
11 millisieverts per year which would be about 100 times
12 what our regulations permit.

13 So I think maybe just a misinterpretation
14 might have crept in here because -- and we weren't
15 sure where this came from because there wasn't a page
16 cited in the pleading.

17 CHAIR YOUNG: Can you give us the cites?

18 MS. BARTLETT: Do you want us to do that
19 later?

20 MR. LEWIS: Judge Young, I may object
21 later on if there's some brand new basis and big
22 analysis. They've had their opportunity, their
23 contention and their two replies. I'm not necessarily
24 acquiescing to a further submittal.

25 CHAIR YOUNG: With that, understood.

1 Obviously, if you want to provide citations, if you
2 provide citations, I don't know -- based on -- well,
3 we'll make our ruling based on what we have before us
4 and we'll consider all the arguments that were
5 previously made about the new and significant in this
6 contention as well.

7 Is there anything else on this contention
8 and anything else that we need to talk about before we
9 leave today?

10 MS. CURRAN: I have a question, Judge
11 Young. Yesterday, we were talking about waiver
12 petitions. You asked me to provide you with some
13 cases, some citations to cases that say you have to
14 have unique circumstances and Mr. Lewis gave you a
15 citation and I want to ask is that enough or would you
16 like some more?

17 CHAIR YOUNG: If you want to submit more,
18 that would be fine.

19 It did constitute part of the argument and
20 so obviously we'll be looking at that, so if there's
21 anything you want to provide on it, you can feel free
22 to do that.

23 I haven't been keeping a running list as
24 we go through of the things that people will be filing
25 at a later time, so I'm going to put that

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1 responsibility on the parties to read the transcript
2 and get it and make sure that we do have in hand
3 everything that you want us to have and -- or that
4 we've asked for and if we don't get it that we'll make
5 our ruling accordingly.

6 We appreciate everyone's contributions and
7 I wish everyone a good trip back to wherever you're
8 going and that traffic won't be too difficult.

9 (Laughter.)

10 We will be issuing our rulings as soon as
11 possible, based on everything we do have before us.

12 So if there is anything new, anything that
13 you want us to have, the sooner the better is
14 obviously a good rule to follow.

15 Thank you all.

16 (Whereupon, at 1:35 p.m., the oral
17 arguments on contentions were concluded.)

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CERTIFICATE

This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission in the matter of:

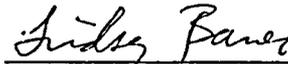
Name of Proceeding: Entergy Nuclear Vermont
Yankee, LLC and Entergy
Nuclear Operations, Inc.

Oral Arguments

Docket Number: 50-293-LR and
ASLBP No.06-848-02-LR

Location: Plymouth, MA

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken by me and, thereafter reduced to typewriting by me or under the direction of the court reporting company, and that the transcript is a true and accurate record of the foregoing proceedings.



Lindsey Barnes
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