

ORIGINAL

UNITED STATES NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:)

EVIDENTIARY HEARING)

PUBLIC SERVICE COMPANY OF)

NEW HAMPSHIRE, et al)

(SEABROOK STATION, UNITS 1 AND 2))

) DOCKET: 50-443-0L
) 50-444-0L
) OFFSITE EMERGENCY
) PLANNING
)
)

Pages: 13951 through 14265

Place: Concord, New Hampshire

Date: June 16, 1988

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1 UNITED STATES NUCLEAR REGULATORY COMMISSION
2 ATOMIC SAFETY AND LICENSING BOARD

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3 In the Matter of:)
4)
5 PUBLIC SERVICE COMPANY OF) Docket Nos.
6 NEW HAMPSHIRE, et al.,) 50-443-OL
7) 50-444-OL
8 (SEABROOK STATION, UNITS 1 AND 2)) OFF-SITE EMERGENCY
9) PLANNING
10 EVIDENTIARY HEARING)

11 Thursday,
12 June 16, 1988

13 Room 302
14 Legislative Office Building
15 Concord, New Hampshire

16 The above-entitled matter came on for hearing,
17 pursuant to notice, at 9:00 a.m.

18 BEFORE: JUDGE IVAN W. SMITH, CHAIRMAN
19 Atomic Safety and Licensing Board
20 U.S. Nuclear Regulatory Commission
21 Washington, D.C. 20555

22 JUDGE JERRY HARBOUR, MEMBER
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24 U.S. Nuclear Regulatory Commission
25 Washington, D.C. 20555

JUDGE GUSTAVE A. LINENBERGER, JR., MEMBER
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(No Appearance)

I N D E X

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WILLIAM CUMMING
JOSEPH KELLER

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3				
4	<u>Massachusetts Attorney General:</u>			
5	No. 48	Prev.	14256	Multipage, FEMA-REP3
6				Feb. 1981, Dynamic
7				Evacuation Analyses
8				(abridged)
9	<u>INSERTS:</u>			
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11	Direct testimony of			13968
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P R O C E E D I N G S

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JUDGE SMITH: Ready to proceed.

3

Is there any preliminary business?

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MR. FLYNN: Yes, Your Honor. There are two matters.

5

At the end of the day there was a discussion about

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reading into the record, or having bound into the record an

7

amended version of the pending contention NECNP Content

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RERP-8. I have discussed the matter with Mr. Cumming, and we

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have concluded that it is not necessary to do that.

10

The other matter is --

11

JUDGE SMITH: Okay, but there is still standing in

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his testimony about that effort and it passed over all three of

13

us. We didn't understand.

14

Is there something we should be concerned about?

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MR. FLYNN: No, Your Honor. The discussion that I

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had with Mr. Cumming was to the point that he detected some

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subtle difference in the wording of the original contention and

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the rewording of it as it had been admitted, and we went over

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that, and the subtle difference he thought he detected turned

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out not to be there.

21

JUDGE SMITH: Okay.

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MR. FLYNN: Now, the other matter that was left

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pending at the end of the day was the extent to which Mr.

24

Keller relied upon NUREG-1210 in the formulation of his

25

opinions. And I have discussed it with, and Your Honor's

1 supposition was correct. And that is that he would have
2 arrived at those same conclusions independently. Mr. Keller
3 has referred to NUREG-1210 in his testimony, largely because
4 for the point that he cited it for, that was the one place
5 where there was a written record.

6 JUDGE SMITH: Okay.

7 MR. SCINTO: Mr. Chairman.

8 JUDGE SMITH: Mr. Scinto.

9 MR. SCINTO: I think you then asked the parties to
10 see if they can come to some arrangement about the Staff's
11 offer of Mr. McKenna's testimony.

12 JUDGE SMITH: Well, I think it's ripe.

13 MR. SCINTO: We have not had an opportunity to do
14 that. I think maybe I can shortcut some of that.

15 It's the Staff's position fairly simple and
16 straightforward. In this proceeding, or in any proceeding when
17 any party refers to an NRC staff document in support of, in
18 guidance for, reliance on for any aspect before an NRC
19 licensing board, and the NRC Staff believes that there has been
20 a misapplication of that NRC Staff document, we feel that we
21 have an obligation to an NRC licensing board to bring that
22 information to their attention and to offer such information as
23 we correct the record.

24 We think that Mr. McKenna's testimony does in fact
25 have sufficient probative value in this proceeding to warrant

1 admission under 2.743.

2 I understand the Board may view the probative value
3 to be somewhat less than what we think. I will nevertheless
4 make the request so it can be denied and I can have it marked
5 as a proffer.

6 JUDGE SMITH: Well, I don't know, Mr. Scinto, if you
7 believe that -- the reason we were going toward not having the
8 McKenna testimony come in was as stated last night, the purpose
9 seemed to be to correct the misimpression in the view of the
10 NRC Staff of Intervenors' witnesses, and we felt that if it
11 could be understood that any reliance upon that report is not
12 available for purposed findings, then your need would
13 disappear.

14 MR. SCINTO: That's correct, Your Honor.

15 JUDGE SMITH: If you feel, nevertheless, that the
16 record to be complete should have those views in, well, we will
17 take a look at it from that direction, too.

18 MR. SCINTO: That's the purpose for our offer, is to
19 ensure that the record for this licencing board is fully
20 complete with respect to matters referred to by any party that
21 relate to the staff for -- you know, Mr. -- we are about to
22 hear testimony from FEMA witnesses, and they may or may not
23 refer to the Staff document.

24 If they refer to the Staff document in a manner which
25 we thought was incorrect, we would then bring that to the

1 Board's attention.

2 JUDGE SMITH: All right, what would be your response
3 to a proposed stipulation that references to reliance upon 1210
4 be deleted from -- constructively deleted from the record and
5 not available for proposed findings? What would be your
6 response?

7 MR. SCINTO: That would be acceptable to the Staff.

8 JUDGE SMITH: Yes, okay.

9 MR. SCINTO: And we would find no need to offer Mr.
10 McKenna's testimony.

11 MS. WEISS: Mr. Chairman.

12 JUDGE SMITH: In the meantime, it may be well to
13 defer final ruling until the point is addressed by the witness
14 in testimony, but it seems like that's the way we're going.

15 MS. WEISS: Well, Mr. Chairman, when we left
16 yesterday, it was our impression that the only thing standing
17 in the way of that stipulation was hearing from FEMA; that Mr.
18 Keller did not intend to rely or it wasn't necessary for him to
19 rely on 1210, and our cross-examination was prepared so as
20 specifically not to elicit that information.

21 So I thought that -

22 JUDGE SMITH: Well, did you know earlier -- I mean,
23 in the first place, we haven't heard from Mr. Keller. But did
24 you know earlier that Mr. Keller does not need 1210 to support
25 his testimony?

1 MS. WEISS: Well, it's my belief from his deposition
2 that he --

3 JUDGE SMITH: Oh, I see.

4 MS. WEISS: -- would say that he reached his
5 conclusions, and if he asked he would say they were supported
6 by 1210, but that was my understanding of what he would say and
7 I expected to hear what I heard this morning.

8 JUDGE SMITH: So you believe that an appropriate
9 solution is to delete the references to 1210, too.

10 MS. WEISS: Yes, and that's -- we prepared our
11 examination so as to make that stipulation possible.

12 JUDGE SMITH: There is only one thing standing in --
13 to that, and that is what does Mr. Keller say.

14 MS. WEISS: And I'm sure he has been well instructed.

15 JUDGE SMITH: Mr. Keller, first let's be sworn,
16 please.

17 Whereupon,

18 JOSEPH KELLER

19 having been first duly sworn, was called as a witness herein
20 and was examined and testified as follows:

21 Whereupon,

22 WILLIAM CUMMING

23 having been previously duly sworn, was recalled as a witness
24 herein and was examined and testified as follows:

25 JUDGE SMITH: You've heard this dialogue, and I guess

1 you know the background but so it's on the record, is that the
2 Staff has offered the testimony of Mr. McKenna for the reasons
3 stated by Mr. Scinto who is representing the NRC Staff in this
4 hearing.

5 It was offered because they perceived a
6 misunderstanding of the implications of that document by the
7 Intervenors' witnesses.

8 Finally, last night it boiled down to it that, well,
9 so long as you're relying upon it in your testimony maybe we'd
10 better have a better explanation of what this document is, and
11 we left it at that.

12 If you can support your testimony without dependence
13 upon NUREG-1210, maybe it can be stipulated that 1210 will not
14 be a factor in this hearing. If that is not the case, well,
15 then, we wanted you to have a chance to, and Mr. Flynn a chance
16 to keep the issues alive.

17 We made the distinction between having a dependence
18 upon the document as compared to agreeing with it, or as
19 compared to even perhaps even getting the idea originally from
20 the document, but the point is, can you support your testimony
21 intellectually without dependence upon NUREG-1210?

22 THE WITNESS: (Keller) I believe I can. The reason
23 that we referenced it, as was mentioned here, is that this was
24 a document that had many of the conclusions which I would agree
25 and had come to some partly during the synthesis of that

1 document, some independently, they were all in one place. And
2 it seemed that it was a place that you could reference and that
3 people could go to and pick them up.

4 It is not necessary to have -- particularly necessary
5 to have 121), but it is convenient because there are a number
6 of things in that document which are, while they are in other
7 places, they may be more succinctly put in that document.

8 JUDGE SMITH: So I think that the parties are pretty
9 much in agreement. If we have a Board-approved stipulation
10 that references to 1210 are constructively, let's say, instead
11 of trying to go back, constructively deleted from the record,
12 and 1210 will not be available for proposed findings or
13 findings by the Board.

14 Does anybody object to that?

15 MR. SCINTO: I would slightly request a modification
16 of that. And that is, references thus far. I don't know how
17 things are going to develop in the future, and we may want to
18 do something in the future.

19 JUDGE SMITH: Okay, well --

20 MR. SCINTO: Our burden would be to reopen and things
21 like that.

22 JUDGE SMITH: Well, that's prudent, and, of course,
23 that's the effect. Right now we're making the determination
24 that you don't have to bring Mr. McKenna.

25 MR. SCINTO: Thank you.

1 JUDGE SMITH: For purposes --

2 MR. SCINTO: I agree with the stipulation understood
3 that way.

4 JUDGE SMITH: For pre-existing purposes.

5 All right. And then we will be denying Ms.
6 Sneider here, I was going to wait until she came here, but we
7 will be denying the motion for rebuttal testimony essentially
8 because of other reasons argued yesterday, that it is late and
9 its value does not justify keeping the evidentiary record open
10 as would be required to receive it.

11 It may, however, be proffered.

12 MR. OLESKEY: We will proffer it, Your Honor.

13 JUDGE SMITH: I was going to suggest -- I don't want
14 to make you jump through hoops to do that. You don't have to
15 prepare the piece of testimony unless you wish.

16 MR. OLESKEY: Well, it's in the process of
17 preparation.

18 JUDGE SMITH: All right.

19 MR. OLESKEY: The problem has been that Ms. Sneider
20 has been here and she couldn't edit it here while it was in
21 Boston. But we will be filing it shortly.

22 JUDGE SMITH: All right. Well, we will receive it.
23 You can file it after the record closes as a --

24 MR. OLESKEY: Nunc pro tunc, okay.

25 JUDGE SMITH: And give it an exhibit number and we'll

1 put it in the rejected exhibit file unless somebody objects to
2 that procedure.

3 All right, would you proceed, Mr. Flynn?

4 MR. FLYNN: Yes, Your Honor.

5 Yesterday I conducted a brief direct examination of
6 Mr. Cumming. Mr. Keller was not here at the time so I will
7 address my questions to Mr. Keller.

8 DIRECT EXAMINATION (Resumed)

9 BY MR. FLYNN:

10 Q Mr. Keller, will you state your name, by whom you are
11 employed, and your position?

12 A (Keller) My name is Joseph H. Keller. I am employed
13 by the Westinghouse Idaho Nuclear Company at the Idaho National
14 Engineering Laboratory, and I am a fellow scientist with that
15 company.

16 Q And your statement of professional qualifications is
17 attached as Attachment B to the proposed testimony before you?

18 A (Keller) I believe that's correct, yes.

19 Q And you have before you a document which bears the
20 heading Amended Testimony of William R. Cumming and Joseph H.
21 Keller on Behalf of the Federal Emergency Management Agency on
22 Sheltering/Beach Population Issues, which bears the date of
23 June 10, 1988.

24 A (Keller) I have a copy, but it does not have the
25 attachments with the professional qualifications. But, yes, I

1 have that copy.

2 Q Did you have a role in the preparation of document?

3 A (Keller) Yes, I did.

4 Q Have you read the document?

5 A (Keller) Yes, I have.

6 Q Do you adopt that as your testimony and wish that it
7 be bound into the record of this proceeding?

8 A (Keller) I do.

9 Q Mr. Cumming, I don't believe I asked you yesterday if
10 your statement of professional qualifications was attached to
11 this document.

12 A (Cumming) Yes, it was.

13 Q And do you wish that to be made part of this record
14 as well?

15 A (Cumming) That's fine.

16 MR. FLYNN: At this point I offer the amended
17 testimony of William R. Cumming and Joseph H. Keller into
18 evidence, and ask that it and the attachments, the statements
19 of professional qualifications of the witnesses, be bound into
20 the record.

21 MR. BACKUS: At this point, Your Honor, I assume that
22 the offer is with the reference to NUREG-1210 on Page 9
23 deleted.

24 JUDGE SMITH: Well, that's a very good point. I
25 think we should have an understanding exactly what is deleted.

1 MR. FLYNN: Your Honor, it places a severe
2 constraint on the witnesses to have to go through the entire
3 cross-examination without ever mentioning the forbidden word
4 1210.

5 I understood the stipulation to be that whatever
6 references there are in the record to date to 1210, they are to
7 be considered superfluous.

8 I would submit, in view of that, the reference to
9 1210 is harmless.

10 I think there is a larger question here, and that is,
11 do I need to instruct the witness never to mention 1210.

12 JUDGE SMITH: Well, no, that's not the point.

13 We try to, to the extent -- I agree that there is no
14 great harm that will be done if nothing happens to this.

15 But to the extent that weeks from now, months from
16 now when people are preparing proposed findings, and we're
17 making decision, and we pick up this piece of testimony and
18 it's forgotten, you know, for the moment, or word processors
19 don't pick it up, there you go. It seems like somebody is
20 relying upon 1210.

21 I don't think that any damage is done to the
22 stipulation when he refers to 1210. I don't think that at
23 all. I mean it's a fact of life. It's just that we were
24 trying eliminate any independent status of 1210 in the hearing,
25 and that simple little phrase as stated in NUREG-1210 does seem

1 to do that.

2 I think it's harmless in or out, but I think it's
3 neater out.

4 MR. FLYNN: Then physically you would ask me to line
5 out that reference --

6 JUDGE SMITH: That's what I would do.

7 MR. FLYNN: -- in the copy that's bound in the
8 record.

9 JUDGE SMITH: Just a simple phrase, "as stated in
10 NUREG-1210". That seems to accommodate it.

11 MR. FLYNN: Very well, I will do that, Your Honor.

12 JUDGE SMITH: That's on Page 9. And just draw a line
13 so that it's visible.

14 (Pause.)

15 (Continued on next page.)

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1 MR. FLYNN: I have done that, Your Honor.

2 JUDGE SMITH: All right. Thank you.

3 MR. FLYNN: Is the testimony now received into
4 evidence?

5 JUDGE SMITH: Yes, the testimony is received. The
6 motion to strike having been ruled on yesterday is preserved.

7 (Amended testimony of
8 William R. Cumming and
9 Joseph H. Keller on behalf
10 of the Federal Emergency
11 Management Agency on
12 sheltering/beach population
13 issues follows:)

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June 10, 1988

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

JUDGE IVAN W. SMITH, CHAIRMAN
JUDGE JERRY HARBOUR
JUDGE GUSTAVE A. LINENBERGER, JR.

_____)	
In the Matter of)	
Public Service Co. of New Hampshire,)	Docket No. 50-443-OL
et al.)	50-444-OL
(Seabrook Station, Units 1 & 2))	Offsite Emergency
_____)	Planning Issues
_____)	

AMENDED TESTIMONY OF WILLIAM R. CUMMING AND
JOSEPH H. KELLER ON BEHALF OF THE FEDERAL EMERGENCY
MANAGEMENT AGENCY ON SHELTERING/BEACH POPULATION ISSUES

INTRODUCTION OF WITNESSES

I, William R. Cumming, am an attorney in the Program Law Division of the Office of General Counsel, Federal Emergency Management Agency (FEMA).

I, Joseph H. Keller, am employed by Westinghouse Idaho Nuclear Company as a Fellow Scientist at the Idaho National Engineering Laboratory, a Department of Energy Laboratory.

Our Statements of Professional Qualifications are included in this testimony as Attachments A and B, respectively.

BACKGROUND

Our testimony addresses several issues. The first is whether the requirement for a range of protective actions specified in Planning Standard J of NUREG 0654/FEMA REP 1, Rev. 1, applies uniformly to each special population within the EPZ. A closely related issue is whether the requirement for a range of protective actions has been met with respect to the summer beach population in the New Hampshire portion of the EPZ. We also consider the issue of whether the decision by the State of New Hampshire not to shelter the summer beach population except in very limited circumstances is supported by a technically appropriate basis.

The NRC Staff has advised FEMA that it does not interpret its regulations to require sheltering for each segment of the EPZ population. In the Supplemental Testimony which was prefiled on January 25, 1988, FEMA stated:

(a) that it is appropriate to consider further the adequacy of the emergency response plan for the transient population of the beaches within the Seabrook Emergency Planning Zone (EPZ) during the summer, that is, from May 15 to September 15, as indicated in the New Hampshire Radiological Emergency Response Plan (NHRERP); (b) that the requirement of NUREG 0654/FEMA REP 1, Rev. 1, for a "range of protective actions" may or may not be satisfied by evacuation alone; (c) that FEMA cannot conclude that the NHRERP is adequate with respect to that beach population until it is clear that the State of New Hampshire has considered the use of sheltering for the transient beach population and explains what use, if any, it intends to make of sheltering. This latter point should not be interpreted to mean that FEMA has imposed a requirement that sheltering be available. If the State of New Hampshire intends not to employ sheltering for the transient beach population (which is not presently clear from the NHRERP), then FEMA expects the State to develop the rationale for such a choice and provide it to FEMA for review.

The materials submitted by the State of New Hampshire make it clear that it

has considered the use of sheltering for the transient beach population and explains what use, if any, it intends to make of sheltering. It also provides a rationale for the State's choice which is technically supportable. As a consequence, FEMA now finds that the provisions in the NHRERP regarding planning elements J.9. and J.10.m. of MUREG 0654/FEMA REP 1, Rev. 1, are adequate with respect to the summer beach population.

The focus of this testimony is primarily two-fold: our position is based on both legal and technical considerations.

Legal considerations were a very important influence. In the discussion which follows, the purpose is not to present a legal argument, but to present as accurately as possible the history of how FEMA developed its position. For this reason, the narrative below follows a chronological sequence.

In a memo to the Regional Assistance Committee dated December 31, 1985, Edward A. Thomas, Chief of the Natural and Technological Hazards Division, Region 1, FEMA, identified the summer beach population within the EPZ as a special planning issue.

The June 18, 1986, letter from the Chief Hearing Counsel of the NRC Staff to the General Counsel of FEMA, which has been served on the parties to this litigation, dealt in part with the question of minimum dose reduction. It expressed the position that no pre-set minimum dose reduction was required for offsite emergency plans to be acceptable and that such plans were intended to cope with a range of accidents, not a single accident.

The Commission ruled, on July 24, 1986, in the Long Island Lighting Company (Shoreham) case (24 NRC 22, 29 (CLI-86-13 1986)) that emergency planning requirements do not require that an adequate plan achieve a pre-set

minimum radiation dose savings or a minimum evacuation time for the plume exposure pathway emergency planning zone in the event of a serious accident; rather they attempt to achieve reasonable and feasible dose savings under the circumstances.

On February 18, 1987, Dr. Robert Bores, Technical Assistant, Division of Radiation Safety and Safeguards, NRC Region I, King of Prussia, Pennsylvania, sent a letter to Edward A. Thomas expressing the view that the NHRERP does achieve significant dose savings for the transient beach population and that there are a number of special circumstances which work together to lessen the risk. At the next meeting of the Regional Assistance Committee (RAC), in April, 1987, a consensus was reached that the issue had been adequately treated in the NHRERP. FEMA was prepared to endorse that position in testimony before this ASLB.

The proposed rule change dealing with the evaluation of utility-sponsored emergency response plans, published by the NRC at 52 Fed. Reg. 6980 (March 6, 1987), included a comment that offsite emergency response plans in general were not to be judged by any specific quantitative standard. This view was reiterated with the publication of the final rule change at 52 Fed. Reg. 42,078 (November 3, 1987).

Dr. Bores's letter of June 4, 1987, to Edward Thomas essentially repeated the views stated in the earlier letter, but the most notable difference was the omission of any reference to the containment structure at Seabrook Station. The foreknowledge that this second letter would be sent prompted FEMA to review the beach population issue. This letter was delivered to Mr. Thomas only hours before FEMA's Statement of Position was filed and served on the parties.

On June 4, 1987, FEMA filed a Statement of Position which took the position that, until the beach population issues were resolved, it could not make a finding of reasonable assurance.

The testimony which FEMA prefiled on September 11, 1987, reiterated the position taken on June 4.

At the start of the current hearings in this case on October 4, 1987, Sherwin Turk, Counsel for the NRC Staff, filed a proposed rebuttal plan with this Board, outlining the testimony which the NRC was considering offering. It included a statement that NRC's regulations were not contravened by the absence of shelter for the beach population.

On October 15, 1987, Dr. Bores sent to Sherwin Turk an account of the RAC meeting of July 30, 1987 in which he expressed the view that the lack of a reference to the Seabrook containment in his letter of June 4, 1987 made no difference in the technical rationale or conclusions.

On November 6, 1987, the ASLB heard arguments on the admissibility of testimony of Stephen C. Sholley, et al. At that time, counsel for the NRC cited the material published with the final rule at 52 Fed. Reg. 42,078 (November 3, 1987) and the Commission's ruling in the Shoreham case (24 NRC 22, 29 (CLI-86-13 1986)).

On November 16, 1987, this Board ruled from the bench that the proffered testimony of Stephen C. Sholley, et al., was not admissible, citing as controlling the Commission's ruling in the Shoreham case (24 NRC 22, 29 (CLI-86-13 1986)).

On November 30, 1987, Sherwin Turk wrote to Stephen Oleskey, Deputy Attorney General of the Commonwealth of Massachusetts, and indicated his

perception that FEMA's prefiled testimony was based on an erroneous legal standard.

On January 7 and 8, 1988, the RAC met and the majority of the RAC endorsed the views stated in Dr. Bores's letter of June 4, 1987.

FEMA filed its Supplemental Testimony on the Sheltering/Beach Population Issues on January 25, 1988.

On February 11, 1988, the State of New Hampshire submitted to FEMA a Response to FEMA's Supplemental Testimony. This was followed by additional material on February 19, 1988.

On February 18, 1988, Sherwin Turk sent a letter to H. Joseph Flynn, FEMA counsel, affirming FEMA's understanding that NRC Staff's interpretation of its regulations did not require sheltering for all accidents at all times and at all locations within the plume exposure EPZ.

The RAC met and discussed the state of the plans for the summer beach population on February 29, 1988. The majority reaffirmed its position that the NHRERP was adequate in its treatment of the summer beach population.

Over the period encompassed by the foregoing discussion, it became increasingly clear to FEMA that to require sheltering for the transient beach population as a condition of a finding of reasonable assurance is inconsistent with the precept that emergency planning requirements do not require that an adequate plan achieve a pre-set minimum radiation dose savings or a minimum evacuation time. This testimony reflects that realization as well as deference to the NRC Staff and Commission on their interpretation of the requirement for a range of protective actions. FEMA agrees with that interpretation.

Furthermore, events since the filing of FEMA's Prefiled Testimony on March 14, 1988, and a continuing review of the record of this litigation have tended to reinforce FEMA's position on the beach population/sheltering issues. In addition to the items listed above, FEMA also relies on:

The Appeal Board ruling in Public Service of New Hampshire (Seabrook) ALAB-838, 23 NRC 585 (1986), affirming the decision of the ASLB (ASLBP 82-471-03, April 29, 1986) rejecting the contention of the Commonwealth of Massachusetts on the beach population;

Partial Initial Decision in Long Island Lighting Co. (Shoreham) LPB-88-13 (May 9, 1988), holding, in part, that monitoring and decontamination are considered protective actions within the meaning of the phrase, "range of protective actions";

All events occurring on the record during the course of these proceedings to date; and

The bench ruling of this ASLB on May 10, 1988, on the admissibility of the Sholley/Beyea testimony.

TECHNICAL APPROPRIATENESS ANALYSIS

On page 2 of the prefiled Supplemental Testimony of January 25, 1988, FEMA stated that it expected the State to consider the use of sheltering for the transient beach population and explain what use, if any, it intends to make of sheltering.

On February 11, 1988, Richard H. Strome, Director of the Office of Emergency Management of the State of New Hampshire wrote to Mr. Henry G. Vickers, Regional Director of FEMA Region I, enclosing a document entitled

"New Hampshire Response to FEMA Supplemental Testimony" which presented the State's justification for choosing to use shelter in the beach areas only in limited circumstances. In essence, the justification is that sheltering for the transient beach population is a protective action of limited usefulness in realizing dose savings, regardless of the season (page 1) and that the public is much more likely to be afforded meaningful dose reductions by moving out of the EPZ than by moving to a shelter within the EPZ (page 2).

The February 11th submission considers an evacuation of the general beach population in the vicinity of the plant as a protective action strategy at the Alert level. In the case of transit dependent transients, temporary sheltering as it is outlined in the proposed plan changes is sensible because it does not delay their evacuation.

The response by New Hampshire to the FEMA Supplemental Testimony is adequate in concept. The transient beach population is treated as a special population and the special considerations afforded this special population include precautionary actions such as early beach closure at Emergency Classification Levels (ECLs) prior to the necessity for considerations of protective actions for the general public.

ECLs range from Notification of Unusual Event (the least severe) through Alert, Site Area Emergency, and General Emergency (the most severe). The current NHRERP calls for beach closure to be considered at the Alert ECL and implemented no later than the Site Area Emergency ECL. For these ECLs there will be no significant doses associated with beach closure as a precautionary action.

It is FEMA's understanding of NRC's current guidance and internal response procedures, ~~as stated in NUREG 1210~~, that initial protective action decisions for areas near the site should be based on plant status without inclusion of calculations of projected doses unless a release of radioactive material is already underway. The basis for the immediate evacuation of the close-in areas without dose calculations is based on the fact that, unless a release of radioactive material is underway, there is little or no likelihood of having reliable predictive information needed to perform dose projection calculations. The information necessary to make an accurate calculation would include the projected duration of a release, the time at which such a release would begin, and the magnitude of a projected release.

In addition, in severe accident sequences the total dose potential is comprised of several components. These are the direct exposure from immersion in the plume, cloud-shine from a plume overhead, exposure from inhalation of the plume, and ground-shine from deposited radionuclides. The exact relationship among the various components will vary with time and distance from the point of release; however, in severe accident sequences the ground-shine component is most likely to be the major contributor to total dose if no protective actions are taken.

In those cases, if the dose reduction strategy is sheltering first followed by an evacuation after plume passage, the total dose reduction would not be as great as that for the immediate evacuation strategy. The sheltering part of the strategy reduces dose primarily from the plume immersion and inhalation component. In the New Hampshire submission, the dose reduction factor ascribed to the available shelters is 0.9. That means that an

individual inside such a shelter would receive 90% of the plume immersion dose he or she would receive without shelter. Another way of expressing this measurement is to say that a building with a dose reduction factor of 0.9 provides a dose reduction of 10%.

The dose reduction for the inhalation dose is greater than 10%, but approaches zero depending on the rate at which outside air, the plume, infiltrates the shelter. It is generally accepted that after two hours, the effectiveness of a shelter to reduce the inhalation exposure begins to degrade. For the "unwinterized" structures in the New Hampshire beach areas, this degradation would likely begin much sooner. During the evacuation after plume passage, the individual previously in shelters would still receive the ground-shine dose, potentially the major component. Therefore, sheltering followed by evacuation is likely to be a less effective means of achieving dose reduction than evacuation alone, particularly for severe accident sequences.

In the immediate evacuation case, as stated above, the dose reduction involves the ground-shine component. The exact dose reduction which would result in most cases is difficult to predict due to the many potential combinations of the geometries of the plume and the evacuation routes. In the extremely rare case where the evacuation routes coincide with the plume path, an estimate of the dose reduction can be made. Because of the dispersion and dilution of the plume as it moves downwind from the point of release, the dose rate decreases with distance. The rate at which the dose rate decreases as a function of distance (r) from the source can be approximated by an inverse power series (r^{-a}), where a varies between 1.5 and 3 depending on the

atmospheric stability class). Generally speaking, the closer an area is to the point of release, the greater the potential dose savings to be achieved by early evacuation.

By implementation of the immediate evacuation strategy, dose reduction greater than those to be derived from a "shelter first-evacuate later" concept can be obtained by movement of the population relatively short distances even in the extremely unlikely case where the plume track and the evacuation routes coincide.

CONCLUSION

The requirement for a range of protective measures has been satisfied even though the State of New Hampshire has chosen not to shelter the summer beach population except in very limited circumstances. With respect to the summer beach population, the planning elements J.9. and J.10.m. of NUREG 0654/FEMA REP 1, Rev. 1, have been met. There exists a technically appropriate basis for the choice made by the State of New Hampshire not to shelter the summer beach population except in very limited circumstances. At the same time, whenever this choice is incorporated into the NHRERP, implementing detail will be necessary.

JOSEPH H. KELLER
PROFESSIONAL QUALIFICATIONS

Education:

Bachelor of Science in Chemistry, Washington College,
Chestertown, MD, 1956.

Master of Science in Inorganic Chemistry, Pennsylvania State
University, University Park, PA, 1958.

Graduate Assistant in Chemistry, Pennsylvania State University,
University Park, PA, 1958-61.

Professional Positions: 1961-1966

Assistant Professor of Chemistry at Idaho State University,
Pocatello, ID. Responsibilities included teaching courses in
freshman chemistry, quantitative analysis, instrumental analysis,
advanced inorganic chemistry and laboratory radiochemistry.

8/66 - 10/73

Employed at the Idaho National Engineering Laboratory in Idaho
Falls, ID (then called the National Reactor Testing Station).
The site is government owned and administered by the Department
of Energy Research and Development Agency. I was employed by one
of the operating contractors, initially Idaho Nuclear Corp.
followed by Allied Chemical Corp. My position was a technical
one in the research and development area of fission product
behavior and properties.

10/73 - 6/74

Employed as research scientist by Nuclear Environmental Services
division of SAI, Inc., Idaho Falls, ID. responsibilities
included contract support on performance of gaseous rad waste
processing equipment in a BWR and analysis of sources of inplant
radiation exposure to workers.

6/74 - 12/78

Employed as scientific and engineering supervisor by Allied
Chemical Corporation at the Idaho National Engineering
Laboratory. Responsibilities included supervision of a research
laboratory involved with analysis of fission product levels in
irradiated nuclear fuel specimens and analysis of the fission
product content of samples of the worlds 1st known natural
fission reactor and the supervision of an analysis laboratory for
environmental samples. Conducted contract research in support of
NRC.

12/78 - present

Employed as scientist by Allied Chemical Corp., Exxon Nuclear Idaho Co., Inc., (after 7/3/79), and Westinghouse Idaho Nuclear Company, Inc. (after 3/1/84), at the Idaho National Engineering Laboratory. Responsibilities include research and development contract support to NRC and FEMA.

Attended FEMA orientation training course on Radiological Emergency Preparedness Planning for DOE Contract Personnel.

Experience:

Proved existence of previously unrecognized airborne radioiodine species to be hypoiodous acid.

Developed sampling device to differentiate various chemical forms of airborne radioiodine.

Developed inorganic adsorbent to retain airborne radioiodine.

Measured gaseous fission products in effluents and process streams in 5 BWR's stations.

Performed effluent and environmental measurements to assess iodine-grass-cow-milk dose pathway at BWR's.

Made effluent and environmental measurements of radioiodine at a pharmaceutical plant to assess environmental impact.

Analyzed fuel specimens to determine accurately the fission yields in the fast flux region of the neutron spectrum.

Analyzed fuel specimens to establish breeding or conversion ratio in Th-U fuels from the light water breeder program.

Developed a sampling device for airborne ^{14}C and ^3H in nuclear plant effluents and process streams.

Participated in environmental program to measure movement of radionuclides through process equipment in PWR's so that the predictive models could be evaluated.

Responsible for technical evaluation of commercial BWR off-gas systems.

Evaluated applicability of off-site, real-time instrumentation to determine the magnitude of unmonitored releases in accident situations.

Evaluated soil to vegetation transfer of stable cesium and strontium.

Reviewed current state of knowledge on scavenging in the environment airborne radioiodine by rain or snow.

Testified as FEMA witness at Indian Point and Shoreham ASLB hearings.

Adjunct faculty member at FEMA Emergency Management Institute.

Invited instructor at Atomic Energy Council of the Republic of China/Taiwan Power Company sponsored "Training Course on Planning, Preparedness, and Response to Nuclear Accidents"

Publications:

J. H. Keller, F. A. Duce, and F. O. Cartan, "Retention of Iodine on Selected Particulate Filters and a Porous Silver Membrane Being Considered for the LOFT Maypack", IN-1078, May 1967

W. J. Maeck, D. T. Pence, and J. H. Keller, "A Highly Efficient Inorganic Adsorber for Airborne Iodine Species (Silver Zeolite) Development Studies", IN-1224 October 1968

R. L. Nebeker, J. H. Keller, L. T. Lakey, D. E. Black, W. P. Palica, and R. E. Schindler, "Containment Behavior of Xenon and Iodine Under Simulated Loss-of-Coolant Accident Conditions in the Contamination-Decontamination Experiment", IN-1394, June 1971

B. Weiss, P. G. Voilleque, J. H. Keller, B. Kahn, H. L. Kreiger, A. Martin, and C. R. Phillips, "Detailed Measurements of ^{131}I in Air, Vegetation, and Milk Around Three Operating Reactor Sites", NUREG-75/021, March 1975

W. J. Maeck, F. W. Spraktes, R. L. Tromp, and J. H. Keller, "Analytical Results, Recommended Nuclear Constants and Suggested Correlations for the Evaluation of OKLO Fission Product Data", at IAEA International Symposium on the Oklo Phenomenon, Liberville, Gabon, IAEA-SM-204/2, June 1975

W. J. Maeck, W. A. Emel, L. L. Dickerson, J. E. Delmore, J. H. Keller, E. A. Duce, and R. L. Tromp, "Discrepancies and Comments Regarding ^{239}Pu Thermal Fission Yields and the Use of ^{148}Nd as a Burnup Monitor", ICP-1092, December 1975

N. D. Dyer, E. B. Neischmidt, J. H. Keller, and B. G. Motes, "Procedures Source Term Measurement Program", TREE-1178, October 1977

N. D. Dyer, J. H. Keller, R. L. Bunting, B. G. Motes, S. T. Croney, D. W. Akers, C. V. McIsaac, T. E. Cox, R. L. Kynaston, S. W. Duce, D. R. Underwood, J. W. Tkachyk, "In-Plant Source Term Measurements at Ft. Calhoun Station-Unit 1", NUREG/CR-1040, July 1978

J. L. Thompson, S. W. Duce, and J. H. Keller, "An Atmospheric Tritium and Carbon-14 Monitoring System", NUREG/CR-0386, September 1978

N. C. Dyer, J. H. Keller, R. L. Bunting, B. G. Motes, S. T. Croney, D. W. Akers, C. V. McIsaac, T. E. Cox, R. L. Kynaston, S. W. Duce, D. R. Underwood, J. W. Tkachyk, "In-Plant Source Term Measurements at Zion Station", NUREG/CR-0715, February 1979

J. H. Keller, L. W. McClure, M. Hoza, A. L. Ayers Jr., R. Lo, and L. W. Barrett, "Boiling Water Reactor Off-gas Systems Evaluation", NUREG/CR-0727, June 1979

R. W. Benedict, A. B. Christensen, J. A. Del Debbio, J. H. Keller, and D. A. Knecht, "Technical and Economic Feasibility of Zeolite Encapsulation for Krypton-85 Storage", ENICO-1011, September 1979

J. H. Keller, B. G. Motes, D. W. Akers, T. E. Cox, S. W. Duce, and J. W. Tkachyk, "Measurement of Xe-131, C-14 and Tritium in Air and I-131 Vegetation and Milk Around the Quad Cities Nuclear Power Station", NUREG/CR-1195, ENICO-1023, March 1980

J. W. Mandler, S. T. Croney, N. C. Dyer, C. V. McIsaac, A. C. Stalker, B. G. Motes, J. H. Keller, T. E. Cox, D. W. Akers, J. W. Tkachyk, and S. W. Duce, "In-Plant Source Term Measurements at Turkey Point Station - Units 3 and 4", NUREG/CR-1629, September 1980

P. G. Voilleque, B. Kahn, H. L. Kreiger, D. M. Montgomery, J. H. Keller, and B. H. Weiss, "Evaluation of the Air-Vegetation-Milk Pathway for ¹³¹I at the Quad Cities Nuclear Power Station", NUREG/CR-1600, November 1981

W. J. Maeck, L. G. Hoffman, B. A. Staples, and J. H. Keller, "An Assessment of Offsite, Real-Time Dose Measurement Systems for Emergency Situations", NUREG/CR-2644, ENICO-1110, April 1982

L. G. Hoffman and J. H. Keller, "Characterization of Soil to Plant Transfer Coefficients for Stable Cesium and Strontium", NUREG/CR-2495, ENICO-1105, June 1982

P. G. Voilleque, L. G. Hoffman, and J. H. Keller, "Wet Deposition Processes for Radioiodines", NUREG/CR-2438, ENICO-1111, August 1982

B. J. Salmonson, L. G. Hoffman, R. J. Honkus, and J. H. Keller, "Guidance on Offsite Emergency Radiation Measurement Systems - Phase 2 - Milk Pathway", WINCO-1009, April 1984

W. J. Maeck, R. J. Honkus, J. H. Keller, and P. G. Voilleque, "Laboratory Measurements of Parameters Affecting Wet Deposition of Methyl Iodide", NUREG/CR-4041, WINCO-1023, September 1984

B. J. Salmonson, L. G. Hoffman, R. J. Honkus, and J. H. Keller, "Guidance on Offsite Emergency Radiation Measurement Systems - Phase 3 - Water and Non-Dairy Food Pathway", WINCO-1012, October 1984

B. J. Salmonson, R. J. Honkus, and J. H. Keller, "Guidance on Offsite Emergency Radiation Measurement Systems - Phase 1 - Airborne Release", FEMA-REP-2 (Rev. 1), WINCO-1029, December 1985

Papers:

F. O. Cartan, H. R. Beard, F. A. Duce, and J. H. Keller, "Evidence for the Existence of Hypoidous Acid as a Volatile Iodine Species Produced in Water Air Mixtures at Tenth AEC Air Cleaning Conference, New York, NY, August 1968, CONF 680821

J. H. Keller, F. A. Duce, D. T. Pence, and W. J. Maeck, "Hypoidous Acid: An Airborne Inorganic Iodine Species in Steam-Air Mixtures at Eleventh AEC Air Cleaning Conference, Richland, WA, September 1970, CONF 700816

J. H. Keller, F. A. Duce, and W. J. Maeck, "A Selective Adsorbent Sampling for Differentiating Airborne Iodine Species at Eleventh AEC Air Cleaning Conference, Richland, WA, September 1970, CONF 700816

J. H. Keller, T. R. Thomas, D. T. Pence, and W. J. Maeck, "An Evaluation of Materials and Techniques Used for Monitoring Air-Borne Radioiodine Species at Twelfth AEC Air Cleaning Conference, Oak Ridge, TN, August 1972, CONF 720823

J. H. Keller, T. R. Thomas, D. T. Pence, W. J. Maeck, "Iodine Chemistry in Steam Air Atmospheres at Fifth Annual Health Physics Society Midyear Symposium, Idaho Falls, ID, November 1970

J. H. Keller, L. L. Dickerson, F. W. Spraktes, and W. J. Maeck, "Determination of the Natural Abundance of Krpton in the Atmosphere at Am. Chem. Soc. Nuclear Chemistry and Technology Division Meeting, Newport Beach, CA, February 1973

J. H. Keller, "Iodine Species Measurements", invited paper at Nuclear Safety Analysis Center Workshop on Iodine Releases in Reactor Accidents, Palo Alto, CA, November 1980

P. G. Voilleque and J. H. Keller, "Air-to-Vegetation Transport of ^{131}I as Hypoiodous Acid", Health Physics 40, p 91-94, 1981

J. H. Keller and L. G. Hoffman, "Proposed Federal Guidance on Emergency Monitoring in the Milk Pathway", at 13th Annual National Conference on Radiation Control, Little Rock, AK, May 1981

J. H. Keller, "Update on Radioiodine Monitoring", at the 14th Annual National Conference on Radiation Control, Portland, MA, May 1982

J. H. Keller, "Iodine Sampling Under Emergency Conditions", invited paper at IEEE Nuclear Science Symposium, Orlando, FL, November 1984

ATTACHMENT A

WILLIAM R. CUMMING

4243 Vacation Lane
Arlington, Virginia 22207
(703) 527-3919

PROFESSIONAL QUALIFICATIONS

Offer over fifteen years' experience in a series of increasingly significant public policy positions where legal/administrative knowledge was used to achieve priority management objectives. Areas of expertise include:

Legal Administration — History of success in coordinating difficult policy and legal issues . . . expert in developing systems and procedures for detecting and controlling fraud and abuse of governmental programs . . . experienced in developing legal frameworks for new programs and decentralizing activities.

Management/Administration — Successful in undertaking many new, understaffed, mission-oriented assignments and achieving management objectives in both civilian and military settings; . . . broad background in program development . . . knowledge of contracting and procurement law . . . skilled in handling debarment and suspension of contractors and program participants.

Personnel Supervision — Supervised groups ranging from 5 to 130 . . . experienced in designing training and program materials . . . skilled in handling employee and union relations . . . successful in developing program alternatives to conserve personnel resources . . . effective at motivating staff members to deliver maximum performance levels.

PROFESSIONAL EXPERIENCE

OFFICE OF THE GENERAL COUNSEL FEDERAL EMERGENCY MANAGEMENT AGENCY

1979 to Present

Assistant General Counsel (Projects) (1986 to Present)

Responsible for development of legal positions related to planning, preparedness response and mitigation for both peacetime and wartime civil emergencies and integration into existing National Security institutions.

- Coordinate Technical Assistance to the Associate General Counsel for Litigation, General Law, Insurance and Mitigation; the Assistant General Counsel and the Regional Counsel.
- Conceive and implement legal policies and procedures related to warning systems, communications, population relocation, protection and damage assessment to be utilized during disasters and National Security Emergencies.
- Coordinate legal plans to assure continuity of the Federal Civil Government in a wide range of National Security Emergencies.
- Develop legal plans for the protection of industry, post-attack recovery and economic stabilization during National Security Emergencies and disasters.
- Develop legal authorities for emergency evacuation and sheltering decisions.
- Senior attorney responsible for legal aspects of agency telecommunications policies, including AT&T consent order impact on National Security Emergencies.
- Provide legal advice and technical support to State and Local governments, on emergency preparedness.
- Develop legal systems to prevent fraud, waste and abuse in programs.

Associate General Counsel (Litigation) (1980 to 1985)

Supervised all attorneys performing litigation services for the Director and General Counsel of the Federal Emergency Management Agency.

- Supervised an average open caseload of 300 defensive and affirmative cases in various state and federal trial and appellate courts; savings to government exceeded \$85 million.
- Established and coordinated Regional Counsels.
- Determined trial and appellate recommendations and strategy for FEMA, coordinated with Department of Justice on cases having government wide impact.

PROFESSIONAL EXPERIENCE . . . *Continued*

Assistant General Counsel (Insurance) (1979 to 1980)

Provided legal advice to the Federal Insurance Administration (FEMA) including responsibility for preparation and sign-off of legal opinions, regulations and conduct of litigation; defended over 700 claims with many individual cases exceeding \$5 million in potential liability.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

1974 to 1979

Attorney-Advisor, Supervisory Trial Attorney
Office of the Associate General Counsel for Regulatory Programs

Supervised six attorneys; prepared all appropriate pleadings, motions and appellate briefs in cases related to HUD programs in federal trial and appellate courts. Reviewed, drafted and commented on legislation.

INTERNAL REVENUE SERVICE

1970 to 1974

Senior Tax Law Specialist (Projects Section)
Estate and Gift Tax Branch (1973 to 1974)

Prepared numerous private and published revenue rulings which determined IRS position concerning income, estate, gift and fiduciary returns.

Special Advisor to the Assistant Commissioner (Stabilization) 1972

Developed regulations of the Pay Board, Price Commission and Rent Advisory Board; served as the Assistant Commissioner's liaison with these organizations on enforcement issues.

Tax Law Specialist, Various Branches under Assistant Commissioner (Technical) (1970 to 1971)

EDUCATION

Juris Doctor, 1967
University of Virginia

Bachelor of Arts, History, *Magna Cum Laude*, 1964
Lehigh University

MILITARY

United States Army, 1967 to 1970; Commissioned 1968
1LT Field Artillery Highest Rank
Nuclear Weapons Unit Commander 1968 to 1969
Staff Officer, Intelligence and Operations 1969 to 1970
Overseas Service, Federal Republic of West Germany
Decorations: Army Commendation Medal

LEGAL

Admitted to Virginia State Bar; admitted to practice before the Virginia Supreme Court and United States Tax Court.

1 MR. FLYNN: At this point the witnesses are available
2 for cross-examination.

3 CROSS-EXAMINATION

4 BY MR. BACKUS:

5 Q Good morning, gentlemen.

6 A (Cumming) Good morning.

7 Q As I indicated yesterday --

8 MR. DIGNAN: Don't I get one. Oh, this is the cross-
9 examination plan.

10 MR. BACKUS: Sure.

11 MR. DIGNAN: Oh, I thought it was an exhibit.

12 MR. BACKUS: As I indicated yesterday my examination
13 under the plan we've worked out on the lead cross-examiner
14 concept is going to be directed, I think, primarily perhaps
15 exclusively to Mr. Cumming.

16 BY MR. BACKUS:

17 Q Mr. Cumming, as it's clear from your statement of
18 qualifications you are a lawyer with the Federal Emergency
19 Management Agency; is that correct?

20 A (Cumming) That's correct.

21 Q And I take that you have never had any training in
22 radiation health physics?

23 A (Cumming) That's incorrect.

24 Q You have had training in radiation health physics?

25 A (Cumming) That's correct.

1 Q Do you have any degrees in that area?

2 A (Cumming) No. The extent of my training was on
3 active duty with the U.S. Armed Forces. The term of art, at
4 the time, was a nuclear accident incident control officer and I
5 went through full training to -- which involved certain types
6 of dosimetry, decontamination procedures, certain aspects of
7 health physics, and certain aspects of population preparedness,
8 is a general term, with respect to nuclear weapons accidents.

9 Q In any event, you have said that you come here
10 prepared to defend the entire testimony as filed on June 10th
11 including that portion of it on pages seven through first half
12 of 11 down to conclusion which is under the heading "Technical
13 appropriateness analysis;" is that right?

14 A (Cumming) That's correct.

15 Q You recall that in your deposition that you
16 testified, among other things, that you would not have us rely
17 too heavily on your technical understanding of the sheltering
18 issue; is that correct?

19 A (Cumming) That's correct.

20 Q You also testified, did you not, on your deposition
21 that, "As a lawyer I felt that if the FEMA position was
22 referenced on technical analysis, it actually -- it lacked the
23 understanding to be able to defend the technical analysis;"
24 correct?

25 A (Cumming) That's correct.

1 Q So you would not feel comfortable, I take it,
2 defending the technical part of this testimony alone?

3 A (Cumming) I feel very comfortable defending it.
4 What weight the Board would give to my expertise, I'm sure it
5 will be quite different than the weight it gives to Mr. Keller.

6 Q Okay.

7 A (Cumming) But to the extent I have technical
8 understanding I am very comfortable with this testimony.

9 Q And you said yesterday when you started out that the
10 one part of that analysis on pages nine through 11, the first
11 part of page 11, that you claim particular responsibility for
12 was the reference which we've been discussing to NUREG-1210; is
13 that correct?

14 A (Cumming) That's correct. I said I was -- I had at
15 least joint responsibility. You said primary; I said there is
16 a legal aspect of that for which I would certainly be the
17 primary sponsor.

18 Q Why was it that you said you would be the primary
19 sponsor of referring to 1210?

20 A (Cumming) It's because I have cleared the training
21 materials that are taught in both the accident assessment
22 course and the exercise evaluators course of the Offices of
23 General Counsel and I have approved that document and prior
24 drafts as one of the principal training documents for
25 utilization at our Emmitsburg facilities as being an authorized

1 approach to offsite emergency response training, where state
2 and local officials, FEMA officials, and others that are not
3 directly under NRC auspices.

4 NRC has, obviously, the responsibility for the
5 training of its own officials.

6 Q You recognize, of course, that NUREG-1210 is a
7 document authored by personnel at the NRC; is that correct?

8 MR. REIS: I'm sorry, Your Honor, I didn't hear the
9 end of the question, his voice dropped.

10 BY MR. BACKUS:

11 Q Is authored by personnel either at the NRC or under
12 contract of the NRC; is that correct? Well, let me strike
13 that.

14 A (Cumming) Principally that's correct. I believe I
15 may be sitting next to a person who had some input into that
16 document.

17 Q Well, let me just ask this question. NUREG-1210 is
18 an NRC document; is that correct?

19 A (Cumming) That's correct.

20 Q Okay.

21 MR. REIS: Your Honor, I wonder whether we ought
22 to -- I object to this question because the line has gone on
23 too long since it's been stricken from the record; I don't know
24 where we're going with it. And since the reference to the
25 document is not to be relied on by anybody, it seems

1 immaterial. Therefore I object to the line.

2 JUDGE SMITH: Do you want to leave that in?

3 MR. FLYNN: I have another purpose for this. Who is
4 this gentleman?

5 MR. REIS: I failed to introduce myself for the
6 record. This is Edwin Reis, Deputy Assistant Chief Counsel of
7 the Nuclear Regulatory Commission.

8 MR. BACKUS: Oh.

9 JUDGE SMITH: Mr. Reis made his appearance before and
10 has --

11 MR. DIGNAN: He shaved.

12 (Laughter)

13 MR. DIGNAN: Mr. Reis is in disguise, he hasn't got
14 his beard.

15 MR. REIS: That's right.

16 MR. SCINTO: Mr. Chairman, I apologize for not having
17 identified Mr. Reis.

18 JUDGE SMITH: I didn't think it was necessary because
19 he's been here before, made his appearance before.

20 MR. SCINTO: But that's courtesy of other counsel, I
21 should have done so.

22 MR. BACKUS: I guess I would have corrected that.

23 MR. REIS: I thought you were being facetious, Mr.
24 Backus.

25

1 BY MR. BACKUS:

2 Q Mr. Cumming, you were at the meeting on January 19th,
3 1988 interagency meeting that there's been much testimony about
4 between FEMA and NRC; were you not?

5 A (Cumming) Yes, I was, the entire time.

6 Q And you heard Mr. Stello of the NRC make some comment
7 along the lines that there would be total war between the
8 agencies in certain circumstances?

9 A (Cumming) My memory is that he made the statement
10 "all out war," not total war.

11 Q All out war. And what prompted the statement that
12 the NRC would make all out war, what was the initiating casus
13 belli?

14 A (Cumming) It dealt with the issue of whether FEMA --
15 MR. REIS: Mr. Chairman, I object to the question and
16 the phrase "casus belli," there has to be a war for there to be
17 casus belli. In other words, the phrase implies there's a war.
18 I think the question could be answered without that
19 implication.

20 MR. LACKUS: I'll rephrase it.

21 BY MR. BACKUS:

22 Q What was the predicate for Mr. Stello saying that
23 there would be all out war between the agencies; what would
24 bring that on?

25 A (Cumming) Who was the definitive authority on

1 interpreting NRC regulations.

2 Q Was it in substance then that Mr. Stello was saying,
3 if FEMA undertook to interpret NRC regulations that would be
4 the start of an all out war between the agencies?

5 A (Cumming) My memory, to be honest, Mr. Backus, is
6 not that clear. I think there was some phraseology like that,
7 but I'm not precise.

8 Oddly enough, in my memory that was not a very
9 significant event in the course of the meeting. There were
10 other more significant events that occurred in the course of
11 that meeting, which was rather lengthy, it was five hours.

12 Q All I'm trying to get is your memory of what was that
13 prompted the comment tha' NRC might engage in all out war with
14 FEMA; what was it?

15 A (Cumming) What I just stated.

16 Q And that was?

17 A (Cumming) Who was the controlling authority for
18 interpreting NRC's regulatory scheme.

19 Q In view of that, Mr. Cumming, did you have any
20 concern about yourself referencing an NRC document, NUREG-1210,
21 in the course of preparing to testify?

22 A (Cumming) Not at all.

23 Q Okay. Now, the testimony that we have admitted here,
24 Mr. Cumming, is dated June 10th, 1988 and it came to us with a
25 cover letter from Mr. Flynn which went to the Board and the

1 parties indicating the items in which the June testimony was
2 different from the March 14th testimony; you're aware of that?

3 A (Cumming) Yes. I'm aware there were two separate
4 filings, one on March 14th and one on June 10th.

5 Q And you're aware that on the June 10th testimony
6 there was a cover letter detailing the differences between the
7 June 10th and the March 14th testimony?

8 A (Cumming) Yes, I am.

9 Q Okay. Are you -- have you assured yourself that the
10 changes from June 10th -- from March 14th to June 10th as set
11 forth in Mr. Flynn's cover letter are accurate?

12 A (Cumming) I have not done that comparison. I trust
13 Mr. Flynn to have accurately reflected the differences.

14 Q You would agree, would you not, that some of the
15 changes from March 14th to June 10 are not merely typos being
16 corrected or grammar being improved, but are indeed substantive
17 changes; correct?

18 A (Cumming) I would argue that certainly the
19 conclusion is the same. The reason that I insisted, and
20 certain data being added to the testimony is, since the March
21 14th filing I have had it reenforced in my own mind, there were
22 a variety of circumstances, even more so the position we filed
23 on March 14th was correct.

24 Q There is new text added to the June testimony over
25 what was on March 14th?

1 A (Cumming) Absolutely.

2 Q And whereas in March 14th the interim testimony which
3 was filed on January 15th marked Mass. AG 42 was incorporated
4 by reference to the extent not inconsistent, on June 10th it's
5 been deleted; is that right?

6 A (Cumming) I'm sorry, could you repeat that.

7 The March 14th testimony incorporated, to an extent,
8 did it not, the interim testimony of January 25th on which you
9 were also a witness?

10 A (Cumming) That's correct.

11 Q And as of the June 10th testimony there is no longer
12 any reference or incorporation of any part of the June or the
13 January 25th testimony; is that correct?

14 A (Cumming) That's incorrect. There is a reference on
15 page two to the January 25th, 1988 testimony.

16 Q Okay. You're quite correct. With the exception of
17 that inclusion of the January 25th testimony, the June 10th
18 testimony differs from the March 14th testimony in that there
19 is no longer appended to it the January 25th testimony which is
20 incorporated by reference?

21 A (Cumming) That's correct.

22 Q Now, we've had much discussion about the process that
23 FEMA went through to have approved the March 14th testimony;
24 you're aware of that?

25 A (Cumming) I'm aware I've been deposed on that

1 subject. I am aware of the lengthy transcript in this
2 proceeding, and I assume there have been lengthy discussions.

3 Q I mean, for example, you certainly know because
4 you're aware that prior to the approval of the -- what became
5 the March 14th testimony there was an extensive meeting in
6 Washington on March 4th involving high officials of FEMA; is
7 that correct?

8 A (Cumming) Absolutely.

9 Q And that the final result of that meeting was that
10 the present director of the -- associate director for state and
11 local programs and support, Mr. Peterson, specifically approved
12 what was to become the March 14th testimony; is that correct?

13 A (Cumming) He approved on March 4th what has been
14 referred to as the bottom line of that testimony. The
15 rationale, to some extent, was developed subsequent to that
16 date.

17 Q All right. Did he approve that testimony, the March
18 14th testimony, as it was finally drafted before it was served?

19 A (Cumming) I don't know that.

20 Q And now I want to ask you, was there any similar
21 review and approval process for the June 10th testimony insofar
22 as it reflects changes from the March 14th testimony?

23 A (Cumming) I don't know that.

24 Q Who was the highest official within the agency, so
25 far as you know, who agreed that the June 10th testimony should

1 no longer incorporate by reference the interim January 25th
2 testimony except for the limited portion that's reproduced on
3 early page of the June 10th testimony?

4 A (Cumming) I have no direct understanding of that,
5 and the reason I don't is because I was at the Shoreham
6 exercise. And while I had faxed the testimony to me to
7 approve, I have no understanding of what transpired at
8 headquarters on that matter.

9 Q So you don't know whether the decision to leave off
10 the January 25th testimony, understanding there's a minor or
11 there's some paragraph that's included, but with exception to
12 that, you don't know under whose authority it was to not
13 include that January 25th testimony as incorporated by
14 reference?

15 A (Cumming) On June 10th?

16 Q Right.

17 A (Cumming) I have no understanding of that.

18 Q And under whose -- who was the person that finally
19 approved the inclusion of the additional materials that are
20 listed on pages -- on page seven about events since the filing?

21 A (Cumming) Well, I certainly said that I felt that it
22 would be an inaccurate statement to the Board if they were
23 included, and I strongly urged that they be included. But I
24 have no understanding of who else reviewed that.

25 Q As far as you know it could have been purely a

1 decision made by agency lawyers?

2 A (Cumming) Could have been.

3 Q Now, you, Mr. Cumming, were, of course, listed as a
4 witness on the January 25th testimony which has been marked as
5 an exhibit here along with Mr. Thomas and Mr. McLoughlin; is
6 that correct?

7 A (Cumming) That's correct. I've been a witness
8 designated on the January 25th, the March 14th, and the June
9 10th.

10 Q And the January 25th testimony, did you subscribe to
11 that testimony as true and accurate at the time that you
12 attached your name to it?

13 MR. FLYNN: I object to the relevance of all of this.
14 There's been a long discussion or repeated discussion on the
15 record about that January 25th testimony, back when we were
16 still arguing about discovery the Board protested that it was
17 unfair of FEMA to try to back-door the January 25th testimony
18 if we weren't going to submit Mr. McLoughlin for examination.

19 At that time I said, we'll withdraw it. And it
20 subsequently turned out that Mr. McLoughlin testified. The
21 Board observed that anything that the Intervenors wanted to ask
22 Mr. McLoughlin about that testimony, they had the opportunity
23 to do that.

24 I don't see the relevance of the line of questioning.

25 JUDGE SMITH: You mean the need for rather than

1 relevance. I guess maybe you can say it's the same thing. But
2 I think that we had a pretty good understanding of what
3 happened to that January 25th testimony.

4 MR. BACKUS: This is a credibility line of
5 examination.

6 JUDGE SMITH: Credibility. Okay.

7 MR. BACKUS: May I proceed?

8 JUDGE SMITH: Yes, Please.

9 BY MR. BACKUS:

10 Q Mr. Cumming, do you have the question?

11 A (Cumming) I'm not certain that I do, I'm sorry.

12 Q Okay. I'm directing your attention to the January
13 25th testimony as which you were listed as a witness.

14 A (Cumming) Yes.

15 Q And I'm asking you, if as of the time that you filed
16 that testimony there was anything in there that you believe was
17 inaccurate or untrue?

18 A (Cumming) I was a principal author of that
19 testimony. There were a number of other principal authors. My
20 memory is vague, but I think at the time I filed it I certainly
21 or I approved it and agreed to it; I certainly thought that
22 every statement in there was true.

23 Q With particular regard to pages seven -- I'm sorry,
24 six and seven of that testimony, section IV entitled "The
25 reasonable assurance issue," are the statements made in there

1 accurate and true?

2 A (Cumming) Excuse me, can I take a minute to get it
3 in front of me.

4 Q Sure.

5 A (Cumming) Could you repeat this.

6 Q I'm directing your attention to the heading IV, roman
7 IV, "The reasonable assurance issue," as set forth on pages six
8 and seven?

9 MR. FLYNN: Is the testimony being offered into
10 evidence? Is it being offered as an exhibit, it's not in
11 evidence now?

12 MR. BACKUS: It's already marked as an exhibit. It's
13 Massachusetts Exhibit 42.

14 MR. FLYNN: Thank you.

15 THE WITNESS: (Cumming) Okay. I have roman IV, "The
16 reasonable assurance issue," what is the language you want me
17 to focus on?

18 BY MR. BACKUS:

19 Q Well, first of all, I want, were you the principal
20 author of that language on reasonable assurance?

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21 (Continued on next page.)
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1 A (Cumming) At this point in time I would have
2 difficulty separating out what was mine and what wasn't mine.
3 I think as I testified in my deposition this January 25th
4 filing was developed as a collegial process. I would certainly
5 take responsibility for any of the statements that are in here.

6 Q All right.

7 The testimony we've been talking about, of course,
8 was attached to the March 14th testimony which stated on Page
9 3, and I quote, "We adopt the FEMA supplemental testimony filed
10 on January 25, 1988, to the extent that it is consistent with
11 this testimony and incorporated by reference."

12 Do you recall that?

13 A (Cumming) I'm sorry, what page is that again?

14 Q Page 3, middle of the page.

15 A (Cumming) Yes, my memory is very clear with respect
16 to the language in those three sentences.

17 Q Okay. Now my question, Mr. Cumming, is, is the
18 discussion of the reasonable assurance issue in the January
19 25th testimony part of -- is that consistent with the March
20 14th testimony, and therefore incorporated, or is it
21 inconsistent with it?

22 MR. FLYNN: I object. It calls for legal
23 conclusions, unless you're asking for his perception, but
24 otherwise I submit this is simply argumentation.

25 MR. BACKUS: Well, I think, Your Honor, this is

1 this witness, as he pointed out, has been in all these pieces
2 of testimony. This testimony says that they were incorporating
3 that January 25th testimony to the extent that it was
4 consistent. And I'm just asking him if, in his opinion, the
5 reasonable assurance discussion in the January 5th testimony is
6 indeed consistent, or if it was not part of what they intended
7 to include by this.

8 JUDGE SMITH: I think it's perfectly appropriate
9 cross-examination.

10 MR. FLYNN: The distinction that I want to make here
11 is that Mr. Backus represented that this was a credibility line
12 of questioning. And if there are some inconsistencies that Mr.
13 Backus wants to point out in proposed findings, then I submit,
14 yes, it is relevant.

15 But the point is whether Mr. Cumming perceives the
16 inconsistencies or not. And if he says there are none, then
17 that opens up the argument that he missed something.

18 But if the point of the question is, does B follow
19 from A, then it's just argumentation.

20 JUDGE SMITH: I don't think that the March testimony,
21 when it uses the phrase "inconsistent" made clear. As a matter
22 of fact, when I read it myself, I was wondering, well, you
23 know, that's a pretty loose term, and I think he has a right to
24 inquire and follow it through to the witness's state of mind at
25 the present I think is what you're --

1 MR. FLYNN: Well, if it's understood that we are
2 inquiring into the witness's state of mind either then or now,
3 then I'll withdraw the objection.

4 MR. BACKUS: Okay.

5 BY MR. BACKUS:

6 Q Do you have the question, Mr. Cumming?

7 A (Cumming) Yes, I do.

8 Q All right.

9 A (Cumming) And I would state that I was the person
10 who insisted that to the extent that it is consistent with this
11 testimony be put in there.

12 Q Okay.

13 A (Cumming) And you want me to say if all paragraph
14 four is consistent with the March 14th filing.

15 Q Right.

16 A (Cumming) Not the June 10th, but the March 14th.

17 Q Right.

18 A (Cumming) I think there is consistency with the
19 entire first paragraph that goes over to the top of Page 7. I
20 think there is some inconsistency with paragraph two.

21 Q Okay, and what is that inconsistency?

22 A (Cumming) To the extent that paragraph two implies
23 that there is an independent, or states that there is an
24 independent judgment outside of NUREG-0654, and I'll explain in
25 a minute why I'm using that term rather than 350.5(a) or (b),

1 it's inconsistent, in my judgment. Otherwise, I would say it's
2 consistent. The reason I state that is this.

3 There is a bridge between the NRC and the FEMA
4 regulatory scheme, and the bridge is 10 CFR Part 50, Section
5 47(b) (1-16), and that this almost exactly identical to
6 44CFR 350.5(a) (1-16).

7 In other words, both of those regulatory schemes
8 lists planning standards which in fact are identical and track
9 to the NUREG.

10 Q Okay. You've just identified the language I wanted
11 to direct your attention to.

12 The first full paragraph on Page 2, or the second
13 paragraph of the discussion of reasonable assurance issues
14 states, does it not, on the January 25th testimony, "FEMA
15 interprets its regulations to mean that it first must
16 determined whether radiological emergency response plans comply
17 with NUREG-0654, FEMA-REP-1, Rev. 1," (citing the regulation);
18 and secondly, whether such plans, "adequately protect the
19 public health and safety by providing reasonable assurance that
20 appropriate protective measures can be taken off-site in the
21 event of an emergency." Citing the appropriate regulation sub
22 (b) instead of sub (a), correct?

23 A (Cumming) That's correct. You've restated exactly
24 what's there.

25 Q So doesn't that not imply, but in fact state that as

1 of January 25th, you as a FEMA witness in this testimony were
2 saying there is a two-part or two-tier test for adequacy:
3 Compliance with NUREG-0654 elements, and a determination of
4 reasonable assurance?

5 Isn't that what it says?

6 A (Cumming) Absolutely.

7 Q A that's not what you believed at the time, is it?

8 A (Cumming) If you are asking me what my personal
9 opinion at the time was, my position at the time was that there
10 was legal support for this position. I did not argue at the
11 time it was the best legal position.

12 Q Your name is on this testimony, and you've testified
13 that you believed every sentence in here was true; is that
14 correct, Mr. Cumming?

15 A (Cumming) Yes. To that extent, it's true.

16 Q All right.

17 A (Cumming) If you are trying to distinguish between
18 my legal arguments and my personal opinion, I have no problem
19 with that except this is an agency filing.

20 MR. FLYNN: Your Honor, this line of questioning is
21 misleading. The statement is that that is FEMA's
22 interpretation that that is the policy that FEMA has adopted at
23 that time.

24 Now to ask Mr. Cumming did he personally believe that
25 is a very different question.

1 JUDGE SMITH: Well, it may be, but I think Mr.
2 Cumming is doing quite well explaining what -- you know, what
3 is role is and what his position is in response to the
4 questions. It's a natural logical area that the Intervenors
5 have a right to flesh out, and we can read the testimony, the
6 January 25th testimony, and we're hearing Mr. Cumming and
7 everything is falling into place. I don't see how anybody is
8 being injured.

9 MR. FLYNN: Very well.

10 BY MR. BACKUS:

11 Q Mr. Cumming, you did testify on the second day of
12 your deposition, which was back on Friday, April 1st, that --
13 and you can refer to this if you want to. It's Volume 2, Page
14 125-126, in response to questions that it was your testimony if
15 the planning standards of NUREG-0654 are met, that a reasonable
16 assurance finding must issue from FEMA; is that correct?

17 And your answer was, "that's correct", right? Do you
18 recall that?

19 A (Cumming) I don't have it right in front of me.
20 Could you repeat that?

21 Q Yes. In fact, I'll be glad to share it with you if
22 you want.

23 JUDGE SMITH: Would you repeat it, please?

24 MR. BACKUS: Okay.

25 THE WITNESS: (Cumming) Question: "Mr. Cumming, I

1 understood your testimony if the planning standards in
2 NUREG-0654 are met, that a reasonable assurance finding must
3 issue from FEMA; is that correct?"

4 Answer: "That's correct."

5 BY MR. BACKUS:

6 Q And the next question and answer.

7 A (Cumming) Question: "Has that always been your
8 view?"

9 "It has always been my view."

10 That has always been my view.

11 Q Okay.

12 A (Cumming) It's still my view.

13 Q All right.

14 A (Cumming) However --

15 Q Okay.

16 A (Cumming) -- as a lawyer, I can make an argument
17 there is some legal support for the posture that there is some
18 independent analysis under the way the FEMA reg is worded.

19 Q Okay. And it was because as a lawyer you could see
20 some merit to a view that there was a requirement that might
21 have to be met beyond NUREG-0654 that you were willing to sign
22 this January testimony with that statement we've been referring
23 to, stating that there is a two-part test?

24 A (Cumming) I felt that there is -- I still feel there
25 is some legal support for that argument. In fact, if pressed,

1 I would say that there is some indication, because of the
2 tracking of the two sections in NRC's regulatory scheme, and
3 I'll read the language.

4 But, remember, FEMA is not expert on NRC's regulatory
5 scheme.

6 Reading form 50.47 --

7 Q Does that include NUREG-1210?

8 MR. BACKUS: I withdraw that. I'm sorry.

9 JUDGE HARBOUR: Mr. Backus, that's not a regulation.

10 MR. BACKUS: No, guidance document.

11 THE WITNESS: (Cumming) (a) (2), the sense reads, "A
12 FEMA finding will primarily be based on a review of the plants.
13 Any other information already available to FEMA may be
14 considered in assessing whether there is reasonable assurance
15 that the plans can be implemented."

16 BY MR. BACKUS:

17 Q All right. As we've previously discussed, Mr.
18 Cumming, we now know that the January 25th testimony has been
19 entirely removed except for the one paragraph that's quoted in
20 the June 10th testimony as part of the June 10th testimony,
21 correct?

22 A (Cumming) That's correct.

23 Q And is it now the agency's legal position, which I
24 take it is consistent with your, as you said, long-held view,
25 the view you've always held, that there is no independent

1 reasonable assurance standard beyond the meeting of the
2 requirements of NUREG-0654?

3 MR. FLYNN: I object. This is clearly calling for a
4 legal conclusion from this witness. He isn't asked what his
5 opinion is. He asked -- the question was specifically what is
6 FEMA's legal position.

7 MR. BACKUS: Well --

8 JUDGE SMITH: If you change it to policy position,
9 program position, whatever, I don't think it really matters.

10 MR. FLYNN: Well --

11 JUDGE SMITH: In any event, FEMA has to have a
12 position on the issue, I guess. I mean if they do or don't, I
13 think that that should be established, and what it is, and he's
14 qualified to give it.

15 The fact that he's a lawyer may help him. The fact
16 that he's part of the --

17 MR. FLYNN: My point is, this is one of the ultimate
18 issues in the case, and it's a matter of legal argumentation.
19 It's a matter for the ultimate decision of the Board.

20 JUDGE SMITH: But it's also a program matter and a
21 policy matter. And we are asked to look at FEMA's position
22 whether it flow from legal, program, policy, inspiration, or
23 whatever.

24 MR. FLYNN: Certainly it's appropriate for that to be
25 brought out. But I still submit it's a matter of argumentation

1 to be developed in proposed findings.

2 Nevertheless, I understand your ruling and I will
3 subside.

4 JUDGE SMITH: Well, all right.

5 No, I think FEMA should have an opportunity to tell
6 us, and I don't know, duty, if it goes that far, but an
7 opportunity to tell us how they view that issue.

8 MR. FLYNN: And I'm not resisting that. I just --
9 but to the extent that it's a legal conclusion, I think that's
10 my role and not his.

11 JUDGE SMITH: Well, I think that the -- it is too
12 blurred the way it is. FEMA has to make policy determinations
13 and program determinations based upon legal interpretations,
14 and they are so mixed up that I don't think the distinction is
15 going to be meaningful anymore.

16 MR. FLYNN: Very well. I will subside.

17 THE WITNESS: (Cumming) Judge Smith --

18 MR. BACKUS: In addition, Your Honor --

19 THE WITNESS: (Cumming) -- if I may make a brief
20 comment.

21 MR. BACKUS: Just a second.

22 I just wanted to add, this testimony starts off Page
23 3 which a chronology headed by legal considerations were a very
24 important influence, and we had a discussion yesterday about a
25 motion to strike on the grounds that this was a legal

1 conclusion.

2 MR. DIGNAN: Well, Bob, he subsided.

3 MR. BACKUS: All right.

4 MR. DIGNAN: Let's go.

5 MR. BACKUS: I'm used to lawyers that say they're
6 going to subside and don't. So I -- but I acknowledge your
7 comment.

8 THE WITNESS: (Cumming) Judge Smith, I'm going to
9 give this speech once, and then I hope I do not have to repeat
10 it.

11 At the time of my deposition, because I was once
12 counsel on the case, I asked that -- all the parties if they
13 purported that they had ever conveyed anything to me that was
14 privileged, that they waive that privilege. Some did, some
15 didn't.

16 I have since decided that that's an improper
17 approach, and in some cases I have hesitated in responding to
18 give the lawyers, and eventually you will see that an
19 opportunity to raise, if there are any objection.

20 I feel that I am obligated to rely on any information
21 conveyed to me. I don't believe any of it was conveyed to me
22 in a privileged manner, and that may explain the slowness of my
23 response. I have no hesitance in answering any of these
24 questions of Mr. Backus.

25 MR. BACKUS: I have not detected any hesitance

1 whatsoever, Mr. Cumming.

2 BY MR. BACKUS:

3 Q Now, do you remember the ques tion?

4 A (Cumming) Yes, I do.

5 Q Okay, what's the answer?

6 A (Cumming) My answer is that it's true that the focus
7 of the regulations that were the underpinnings from the June 4,
8 1987, September 11, 1987, January 25, 1988 filings of FEMA
9 focused on the FEMA regulatory scheme.

10 It's also true that the March 14th and June 10th
11 filings reflect the influence of various decisions of the
12 Commission and other materials on the NRC regulatory scheme,
13 and there's a reason for this, and it was part of the debate
14 that went on from June.

15 And the reason for this is very simple. Basically
16 the FEMA position is now that there is in fact one definitive
17 set of determinations that are made on the regulatory scheme.
18 FEMA has no independent adjudicative bodies. It has no
19 commission. And that for FEMA to adopt before licensing boards
20 positions that do not reflect what in fact is either settled
21 law or largely settled law is to be banking its head against
22 the wall.

23 Q Well, Mr. Cumming, what I'm trying to get at, and I
24 hope is of interest here, is the fact that on January 25th FEMA
25 filed, with you as one of its witnesses, a piece of testimony

1 that you say is true that said there is a two-part test before
2 FEMA will sign off on an off-site emergency plan.

3 Now we have testimony dated June 10th without any
4 assertion of a two-part test. And if I hear you correctly
5 saying, no, there is no two-part test. You meet NUREG-0654 and
6 you win.

7 What happened between January 25th and June 10th to
8 cause the agency to have a different opinion of whether there
9 is a two-part test or not?

10 A (Cumming) Well, probably my hammering on them for
11 those six months had a material impact on them --

12 Q Okay.

13 A (Cumming) -- as to what the law is.

14 Q All right.

15 So finally some time in the first six months of 1988,
16 your legal opinion as to the better legal view prevailed and
17 become the agency position which you are now here asserting as
18 a witness on the June 10th testimony, right?

19 A (Cumming) I would agree with that.

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1 Q Just to end this up, had it prevailed by March 14th
2 when you included the January 25th testimony as incorporated by
3 reference?

4 A (Cumming) In my judgment I would say, yes.

5 Q Although you were the one that said you insisted that
6 the January 25th testimony be appended to the March 14th
7 testimony?

8 A (Cumming) That's correct.

9 MR. FLYNN: I object.

10 THE WITNESS: (Cumming) Are you objecting?

11 MR. FLYNN: Yes. I'm --

12 MR. BACKUS: Well, I think it's now time for a motion
13 to strike, because he's answered the question.

14 THE WITNESS: (Cumming) No, I haven't answered the
15 question.

16 MR. BACKUS: I thought he said, that's correct.

17 THE WITNESS: (Cumming) I said that's correct, but
18 with one exception. I don't know if --

19 JUDGE SMITH: Do you want to hear it or not?

20 (Laughter)

21 JUDGE SMITH: Do you want to gamble?

22 MR. DIGNAN: It's a winner, Joe, I got a feeling.

23 Let him go.

24 MR. FLYNN: I'll withdraw the objection.

25 MR. BACKUS: Subsides.

1 BY MR. BACKUS:

2 Q Would you want to finish your answer, Mr. Cumming?

3 A (Cumming) On the March 14th filing I argued
4 strenuously that there be no reference to the January 25th
5 filing, and because of my strong insistence I didn't win, did
6 not have it referred to at all, but the language, to the extent
7 not inconsistent, got put in there.

8 Q Oh, did I mishear you. Then you were the one that
9 didn't want the January 25th testimony included?

10 A (Cumming) I absolutely did not want the January 25th
11 in.

12 Q All right.

13 A (Cumming) And you should know why from my
14 deposition.

15 Q Okay. Your testimony on both March 14th and on June
16 10th includes after the heading "Legal considerations were very
17 important," a chronology of events or decisions made that you
18 believe were important to the determination of the ultimate
19 FEMA position; is that correct?

20 A (Cumming) That's correct.

21 Q And this is on pages, I think, six through nine of
22 the June 10th testimony; right?

23 A (Cumming) I believe it starts at three.

24 Q I'm sorry, three.

25 A (Cumming) Four, five, six and seven of the June

1 10th.

2 Q Right. And the purpose of this was to list those
3 developments that were important to influence how or understand
4 how FEMA arrived at its present position; correct?

5 A (Cumming) That's correct.

6 Q Now, I notice here that you made no mention of
7 FEMA-REP-3 which is listed in the index of guidance documents,
8 which has been marked as an exhibit in this proceeding; is that
9 correct?

10 A (Cumming) That's true. And it's certainly true that
11 if anyone understood that absolutely everything that had ever
12 transpired on Seabrook with respect to the agency had to be
13 included in this list or I somehow was misstating the case, I
14 apologize. Since that record, in my judgment, would fill this
15 room with paper, not all those references are made.

16 Q Well, I understand that, but FEMA-REP-3 is still
17 listed as a operative FEMA document at some level of agency
18 guidance, is it not?

19 A (Cumming) I believe that FEMA-REP-3, in my judgment,
20 could very well have been included. But there are other
21 documents that could also have been included.

22 Q Okay. And were you aware of FEMA-REP-3 when you were
23 preparing this testimony, did you know it existed and basically
24 what it dealt with?

25 A (Cumming) I've been aware of FEMA-REP-3 since it was

1 first published.

2 Q In fact, it's based on that that you felt, since long
3 before you became a lawyer or a witness in the Seabrook
4 proceeding that Seabrook was a case that was going to be
5 difficult and controversial, weren't you?

6 A (Cumming) Absolutely.

7 Q I think you told us in your deposition that it was
8 through your efforts that you arranged for Region 1, FEMA
9 which, of course, is the area that includes the Seabrook site,
10 to be the very first region to have its own regional counsel at
11 the time when you had that luxury; right?

12 A (Cumming) That was certainly my ulterior motive.

13 Q And you recognized long before you started working on
14 the Seabrook litigation as a lawyer that there were likely to
15 be serious and difficult issues for the agency regarding this
16 particular plant; right?

17 A (Cumming) Absolutely.

18 Q And part of that would have come from what was
19 involved in FEMA-REP-3 which describes Seabrook as a special
20 case; right?

21 A (Cumming) FEMA-REP-3 speaks for itself, whether they
22 use the words "special case" or not, I don't remember.

23 Q Do you remember that in FEMA-REP-3 there was talk
24 about consideration being given to road construction or ramp
25 construction at Seabrook?

1 A (Cumming) Yes.

2 Q Is there any FEMA documents that have raised those
3 considerations for other plant sites that you know of?

4 MR. FLYNN: I object to the question. The line of
5 questioning up until now has to do with what Mr. Cumming
6 understood to be influential in FEMA in arriving at its
7 position. The pending question has to do with the comparison
8 of Seabrook to other sites, and I submit that that's
9 immaterial, irrelevant, and improper.

10 MR. BACKUS: Well, I'm just exploring the
11 decisionmaking that went into the inclusion or exclusion of
12 items in this chronology of significant events. And obviously,
13 we think it's surprising that FEMA-REP-3 was not mentioned, and
14 I'm just exploring the importance that FEMA-REP-3 could
15 reasonably be determined to have for somebody trying to list
16 the significant events.

17 JUDGE SMITH: I don't understand the relationship
18 between that and ramps at other sites.

19 MR. BACKUS: Well, I think that -- I don't know,
20 maybe the witness is going to tell me there are other sites.
21 When you have a site, as at Seabrook, where the agency itself
22 is considering the problem so severe that they are suggesting
23 that you need major construction, that would seem to me to
24 elevate the importance of this document to the point where it
25 ought to be included in a chronology, if it's intended to be a

1 full and accurate chronology of significant events. That's
2 all.

3 MR. FLYNN: And I haven't objected to the line of
4 questioning until this pending question. It calls for a
5 comparison of --

6 JUDGE SMITH: Well, we've frequently cited the
7 Commission's admonition that one plant is not to be compared to
8 another, and for that reason we have not allowed inquiries into
9 other plants. On the other hand, when the issue is consistency
10 -- when the issue is the basis for the planning for Seabrook
11 and he's cross-examining and he might want to show an
12 inconsistency and this witness's actions or the agency's
13 actions, that might be another matter, I don't know. It would
14 depend somewhat upon the value of it.

15 But the fact is, you're correct, the planning for
16 another site as such is not relevant to the planning for
17 Seabrook by Commission fiat.

18 JUDGE LINENBERGER: Mr. Chairman, I have a slightly
19 different observation here with respect to Mr. Backus's
20 comments about inclusion or not inclusion of FEMA-REP-3. I
21 thought I heard Mr. Cumming earlier say, these are my words not
22 his, a line had to be drawn somewhere, it was drawn in a way
23 that excluded FEMA-REP-3, but that in his judgment that is a
24 document that could well have been included.

25 Do I characterize what you said correctly, sir?

1 THE WITNESS: (Cumming) That's correct.

2 JUDGE LINENBERGER: Thank you.

3 MR. BACKUS: Well, let me withdraw the question,
4 then.

5 BY MR. BACKUS:

6 Q And just follow that up by saying, in your judgment,
7 would it have been better to include it?

8 A (Cumming) No, because the truth is that FEMA-REP-3
9 is a contractor-produced document which, in my judgment, never
10 gained the influence in the agency that it probably should
11 have.

12 Q Supposed it had gained the influence in the agency
13 that you think it should have, then it would have been
14 included, I take it?

15 MR. FLYNN: That's purely speculative.

16 THE WITNESS: (Cumming) To the extent that I have
17 control over the testimony, yes.

18 MR. BACKUS: Thank you. All right.

19 BY MR. BACKUS:

20 Q Now, another item that's not mentioned here, Mr.
21 Cumming, but that you testified about in your deposition was
22 the self-initiated review on the Pilgrim plant in the summer of
23 1987; is that right?

24 A (Cumming) That's correct.

25 Q And I understood you to say that you were the senior

1 legal person in the agency that concurred in that finding?

2 A (Cumming) Absolutely.

3 MR. FLYNN: I'm going to object at the beginning of
4 this line, again on relevance grounds. We're going right smack
5 back into a comparison with other sites.

6 MR. BACKUS: Well, Mr. Cumming has testified in his
7 deposition, as he said, that that was a significant event in
8 the course of this, in his mind, and yet it's not included in
9 the testimony.

10 MR. FLYNN: Well, the fact that I didn't object
11 during the deposition shouldn't be taken as a waiver of the
12 objection -- the standards for the admissibility of the proper
13 questioning in a depositions are different from at a hearing.
14 I press the objection.

15 MS. WEISS: May I be heard, Mr. Chairman. I think
16 this evidence is intended to show inconsistency between the
17 approach being taken at Pilgrim and the approach being taken at
18 Seabrook. And it's particularly relevant because the same
19 person whose testifying here was the senior person who approved
20 the approach taking at Pilgrim with regard to how FEMA's rules
21 ought to be interpreted.

22 MR. REIS: Mr. Chairman, if the staff can be heard,
23 that's the very reason why we should not go into it here. It
24 gets to other plants. We have 100 other licensed plants. It's
25 just too tangential and doesn't have enough probative force to

1 be inquired into here.

2 What was the cause or not cause of anything done at
3 Pilgrim is just -- should not be opened up in this proceeding.

4 MR. OLESKEY: Well, there's testimony that's been
5 given consistently here including testimony, as I recall it, by
6 the NRC panel. In any event, by FEMA witnesses, that both
7 matters which with respect to beach populations posed for the
8 RAC and FEMA substantially the same issues were being evaluated
9 at the same time.

10 So it's almost fundamental that we ought to be
11 allowed to explore whether or not this agency takes a
12 consistent position to what it defines as substantially the
13 same issue going on in the same region within the agency.

14 MR. FLYNN: But that assumes that the circumstances
15 at Pilgrim are the same as they are at Seabrook, and that
16 hasn't been established. Once we get out of that you're back
17 in a comparison of the sites.

18 MR. OLESKEY: There's clear testimony in the record
19 at this point that the beach population issue and the adequacy
20 of the emergency response plans with respect to evacuation and
21 sheltering were viewed by the RAC and FEMA as -- for purposes
22 of NUREG-0654 and reasonable assurance, substantially the same
23 in '37 -- especially in 1987 when these matters were current.

24 MR. DIGNAN: Where's that evidence in the record?
25 Just tell me the page reference to that one.

1 MR. OLESKEY: I don't carry page references on my
2 sleeve, Mr. Dignan, you're going to have to take
3 representation. If you disagree --

4 MR. DIGNAN: I do.

5 MR. OLESKEY: -- go ahead and make your argument.

6 MR. DIGNAN: I do. I don't know of any place in the
7 record where evidence of that nature appears. I could be
8 wrong, but if you give me a cite, I'll be glad to retract that.

9 MR. OLESKEY: I wasn't intending to have to make this
10 argument this morning. I thought it was so established by the
11 record. I didn't go back and hunt for references.

12 MR. DIGNAN: Well, maybe the Board has it clearly in
13 mind and will rule in your favor, if they do, I'm sure.

14 JUDGE SMITH: This member does not have any
15 independent memory of what he's saying, although I do recall
16 the subject matter.

17 Mr. Backus, what was your question?

18 MR. BACKUS: I'm not sure, but the question I was
19 trying to get at was to ask this witness, given the fact that
20 he was the senior legal official in the agency to approve a
21 negative finding on the Pilgrim emergency planning in the
22 summer of 1987. If, in his opinion, that's consistent with the
23 position that the agency, including him, is now taking on
24 regard to the Seabrook plans. That's the gist of what I want
25 to ask him.

1 JUDGE SMITH: But just -- the overall conclusion of
2 negative finding, without any specifics.

3 MR. BACKUS: Right. Well, I guess I should ask a
4 predicate question, and I can do that.

5 BY MR. BACKUS:

6 Q Would you agree, Mr. Cumming, that although Pilgrim
7 and Seabrook are both plants on the sea coast in New England,
8 that the emergency planning problems are more difficult at
9 Seabrook because of the population and the road network there
10 than they are at Pilgrim; would you agree with that?

11 MR. FLYNN: Same objection.

12 JUDGE SMITH: Was there an objection?

13 MR. FLYNN: Yes, I said, same objection.

14 JUDGE SMITH: Well, I see where you're going. I want
15 to consult with the Board as to what the guideline we think
16 should be on it.

17 MR. BACKUS: I'm not -- you understand, I'm adopting
18 what Attorney Weiss said completely. My purpose here is not to
19 compare the sites per se, but to compare whether the agency's
20 position is consistent.

21 JUDGE SMITH: I understand that. That's -- let's
22 take our mid morning break and we want to talk about this. Is
23 this going to be an important part of your cross-examination we
24 better have a pretty firm aspect of it.

25 MR. BACKUS: On a scale of one to 10, five.

1 (Laughter)

2 (Whereupon, a brief recess was taken.)

t/46 3 JUDGE SMITH: We want to announce our ruling on the
4 objection about FEMA's finding in Pilgrim. As we've observed
5 the Commission will not permit Licensing Boards to compare the
6 plans of one plant to another because generally they're not
7 comparable.

8 However, the same regulations and planning standards
9 apply. And the admonition not to compare emergency plans does
10 not bar categorically an inquiry into the quality of FEMA's
11 position, and that inquiry can be tested by consistency where
12 it is possible to test consistency.

13 So we don't categorically bar an inquiry contrary to
14 Mr. Reis's argument.

15 On the other hand, we do not have an evidentiary
16 record nor are we likely to have an evidentiary record in this
17 case which will permit comparisons because we have no evidence
18 before us that the situation driving FEMA's finding in one case
19 is comparable to this one. So you have not yet, with the
20 question that you have posed, established a basis to test
21 consistency.

22 MR. BACKUS: All right, let me --

23 MS. WEISS: If I may be heard. Mr. Thomas testified
24 on this yesterday or the day before, and did state that in his
25 view the situations were quite similar with respect to the

1 beach population and he felt the rulings were inconsistent.

2 JUDGE SMITH: Well, we don't foreclose your asking
3 the witness.

4 MS. WEISS: Okay.

5 JUDGE SMITH: Whether their actions were consistent.
6 But we do not accept the premise that there was a commonality,
7 as far as he's concerned, you know, we don't accept that
8 premise. But we don't foreclose testing on consistency.

9 MS. WEISS: I was just responding to your assertion
10 that there wasn't anything establishing that on the record, and
11 I think that there is.

12 JUDGE SMITH: Well --

13 MS. WEISS: It may not be dispositive, but there's
14 evidence on this.

15 JUDGE SMITH: We do not have an evidentiary record
16 establishing the situation at -- Pilgrim is so comparable to
17 Seabrook that there is a presumption that there should be
18 consistency. But you can ask him, you know, were you
19 consistent? How about this, how about that? But there's no
20 assumption.

21 MR. BACKUS: Well, let me go right to that.

22 BY MR. BACKUS:

23 Q Mr. Cumming, you certainly think it's important for
24 the agency to apply -- FEMA to apply consistent standards to
25 its review of plans taking into account plant characteristics

1 and site considerations, but that the standards be applied
2 consistently to reviews of plants in various places, don't you?

3 A (Cumming) Absolutely. I think I am one of the
4 leading bugs in the agency about the issue of technical
5 uniformity.

6 Q And as of last summer on a self-initiated basis FEMA
7 had come up with a negative finding on the Pilgrim plant; is
8 that correct?

9 A (Cumming) That's correct.

10 Q And in effect, as of last summer after the filing of
11 the June 4th statement of position, the agency had a negative
12 finding on Seabrook in regard to the beach population issues;
13 is that correct?

14 MR. FLYNN: I -- objection. Well, let me call for a
15 clarification. You talk about negative finding, you're
16 implying that FEMA's position said, there is no reasonable
17 assurance, and that is a mischaracterization of what the
18 testimony said. And that's the basis for my objection.

19 MR. BACKUS: All right. Do you want to suggest
20 something to me; I don't want to get into arcane terminology
21 that may have some significance in your --

22 MR. FLYNN: Well, I don't have the testimony in front
23 of me, but my recollection is that it said that we were not
24 prepared at that time. Until the issue was resolved, we were
25 not prepared.

1 MR. BACKUS: Well, let me try this.

2 BY MR. BACKUS:

3 Q As of last summer, in light of the agency's position
4 filed on June 4th, the well known pages 38 and 39 of that
5 filing, it was fair to say that the agency was saying that the
6 New Hampshire emergency plans for Seabrook did not pass muster
7 as of that time; right?

8 A (Cumming) Yes.

9 Q Okay. So as of last summer the agency had a
10 consistent view of the emergency plans for these two plants
11 we've been mentioning, in a general sense?

12 A (Cumming) To the extent that the Pilgrim finding was
13 premised on beach population issues, in my judgment, they were
14 consistent as of last summer.

15 Q Are they consistent as of today?

16 A (Cumming) As I testified in my deposition, I thought
17 that in light of our formal change of position before this
18 Board that to the extent the same issue controlled the Pilgrim
19 finding it should be revisited.

20 Q Meaning, in your opinion the negative finding on
21 Pilgrim would have to be withdrawn in light of the position the
22 agency has taken on March and June on Seabrook?

23 A (Cumming) Okay. I testified at my deposition that
24 the FEMA finding on Pilgrim, was formally transmitted to NRC,
25 and it was my understanding based on a Federal Register notice

1 that was published, that the director of NRR had formally
2 overturned that finding and indicated that it was not an issue
3 any longer at Pilgrim.

4 In a meeting on April 11th with officials of NRC, my
5 understanding of what had been done was corrected. I was
6 incorrect in my deposition, and I was told, yes, NRC still has
7 substantial concerns about Pilgrim based on our transmittal of
8 our finding.

9 Q Well, in light of that, that there was a meeting on
10 April 11th of 1988 with NRC officials that I take it indicated
11 support for the FEMA position, negative position on Pilgrim,
12 these --

13 A (Cumming) There were a variety of factors upon which
14 the Pilgrim determination was made or finding was made. In my
15 judgment, the beach population was not the most significant.
16 There are reasons for that including the numbers of persons, as
17 I understand it, that are on the Massachusetts beaches.

18 But given that the treatment is uniform, my
19 understanding was, yes, there were still significant concerns,
20 and that NRC had treated with the greatest respect our negative
21 finding on Pilgrim.

22 Q All right. And did that have to do then primarily
23 with issues other than people on the beaches near Pilgrim as
24 opposed to beaches -- beachgoers at Seabrook?

25 A (Cumming) It wasn't detailed. But it's clear that

1 the written public documents filed by FEMA indicated that in
2 part the Pilgrim negative determination rested on a beach
3 population analysis under the NUREG.

4 Q Now, when you say, your deposition, you were talking
5 about what you said on the second day of your deposition on
6 page 83, I believe, where you said and I quote: "To the extent
7 that the negative finding in Pilgrim rests on those issues, to
8 my knowledge, they would have to be reevaluated in light of
9 what we filed on March 14th."

10 A (Cumming) That's correct.

11 Q And you're now saying that, in view of what the NRC
12 told you on April 11th that you may not feel you need to
13 reevaluate what you had done in regard to Pilgrim?

14 MR. FLYNN: I object to the characterization that I
15 don't believe that is what the witness said.

16 JUDGE SMITH: Well, you know what would be helpful to
17 me, if you could start with the time that you believe that the
18 FEMA finding at Pilgrim should be used or revisited, if you
19 could start with that point and just, in a straight and
20 narrative way, tell us what has happened and where we are.

21 THE WITNESS: (Cumming) Okay. Approximately the
22 first week of August FEMA transmitted a negative finding on
23 Pilgrim. About two weeks later I saw a letter authored by
24 Chairman Zech to the Governor of Massachusetts which related
25 the FEMA finding and indicated that they were -- the concerns

1 were of significance and should be fully considered by the
2 Commonwealth. And that went from Chairman Zech to the Governor
3 of Massachusetts.

4 And one of the specifically listed issues was, styled
5 beach population or beach population issues, my memory is not
6 quite accurate on that.

7 I was very concerned because when FEMA makes a
8 finding, either favorably or unfavorably on reasonable
9 assurance, I can assure you that everyone who is involved with
10 that gives their fullest attention, their most meaningful
11 purpose to making sure it's the best position an agency can
12 transmit.

13 And I have to state that I was extremely upset when I
14 saw the Federal Register notice, and I was quite relieved when
15 I saw Chairman Zech's letter that we had not been officially
16 ignored.

17 To that extent, the issues were consistent, and the
18 analysis was consistent. In fact, one of the reasons that over
19 the summer of 1987 FEMA probably didn't focus enough attention
20 on Seabrook was that it was consumed throughout most of that
21 summer with Pilgrim.

22 We had had a formal report by the Commonwealth of
23 Massachusetts that stated that they had significant concerns
24 with offsite planning at Pilgrim. And we had had that report
25 for over a year, and had never transmitted that document,

1 although it was -- and this is part of the arcaneries of NRC's
2 own internal procedures. It had been received in certain
3 elements of NRC. It had been received by FEMA, but FEMA had
4 never taken a position on it.

5 I felt to have documentation by the Governor of a
6 State that a plan was inadequate and had not have officially
7 communicated our position on that information to the Nuclear
8 Regulatory Commission was close to neglect.

9 So I have to admit that I was pushing to make sure
10 that FEMA had a position, even though the plant was not
11 operating, that we had somehow communicated that to the Nuclear
12 Regulatory Commission.

13 And that's the basis of why they were consistent at
14 that time.

15 JUDGE SMITH: Now, your answer, at my invitation, I
16 think has gone beyond the area of consistency, which is the
17 only justification for inquiring into anything about Pilgrim.

18 Would you state again your view about consistency and
19 revisiting, as we sit here today?

20 THE WITNESS: (Cumming) Since our filing, I
21 testified at my deposition at the end of March and it's still
22 my opinion, that to the extent our filing concerned the beach
23 population issue at Pilgrim that we would have to revisit that,
24 and it's my understanding that there is some revisitation of
25 that going on.

1 JUDGE SMITH: And is your concern there consistenc' ?

2 THE WITNESS: (Cumming) Absolutely.

3 BY MR. BACKUS:

4 Q I thought you were starting to say, Mr. Cumming, and
5 I may be wrong and I want to give you a chance to correct it if
6 I am, that what you originally thought might not be consistent
7 between the agency's position at Seabrook beaches versus
8 Pilgrim beaches, would not be a concern to you if the NRC told
9 you they shared the concern about Pilgrim?

10 A (Cumming) I think we have to break down your
11 question. The NRC has conveyed to us that they feel that
12 FEMA's concerns on beach population issues are significant.
13 It's also true that the regulatory scheme of NRC and their
14 decisions on that have significance within FEMA. We are not
15 granted independent authority to challenge NRC positions. We
16 accept them as the final position of the federal government.

17 And to that extent, we have had significant
18 information that's come in since the summer of 1987, which is
19 detailed in my testimony, the agency's position.

20 Q So that, in your opinion, if NRC has no concerns
21 about Seabrook, is FEMA entitled to have concerns as an agency?

22 A (Cumming) I would be very concerned officially if I
23 had any indication that NRC had no concerns about Seabrook or
24 Pilgrim. I have absolutely nothing in the past record of time,
25 and I have been in every meeting with Victor Stello since 1987,

1 throughout 1987 and 1988 with the exception of one meeting on
2 October 9th or October 8th when I was up here the first week of
3 the hearing where Mr. Stello came over and indicated to FEMA
4 staff that they were going to have a staff recommendation to
5 the Commission on the NRC rule, with the exception of that
6 meeting I've been at every meeting with Victor Stello
7 throughout 1987 and 1988.

8 I have absolutely no impression that anyone at NRC is
9 not fully concerned with health and safety issues, particularly
10 about this plant.

11 Q Well, that wasn't my question. Let me ask this
12 question. You previously testified in your deposition, as far
13 as you're concerned NRC's interpretation of reasonable
14 assurance is binding on FEMA as well as NRC; is that right?

15 A (Cumming) There is no statutory definition of
16 reasonable assurance. Both regulations, the FEMA regulations
17 and the NRC regulations use the term "reasonable assurance."

18 To my knowledge, that term is undefined by either
19 agency and any other document. So if you're stating that if
20 there is a final determination of reasonable assurance on a
21 plant, which is in fact what the statute vests that
22 responsibility in NRC, then, yes, that would be binding on FEMA
23 irrespective of whether we found there was reasonable assurance
24 or did not.

25 Q Suppose FEMA felt, Mr. Cumming, that a plant was a

1 horrible site, let's just say as once somebody described a
2 particular site, lousy shelter and lousy evacuation, but NRC
3 through its, say, representative to the RAC, something like
4 that, is saying the plans are adequate; does FEMA then have, if
5 that's an authorized NRC position, does FEMA then have an
6 independent right to say the plans are inadequate?

7 MR. FLYNN: Objection. The question is calling for
8 the witness's opinion on what is an adequate site, and that is
9 -- first of all, it's a legal conclusion.

10 Secondly, it has nothing to do with FEMA's role.

11 JUDGE SMITH: No, he's not -- I just disagree with
12 you. I think it -- I'm not sure that I agree that's the best
13 hypothesis to put to him, but I think that the concept is
14 valuable for testing just how you go about it.

15 The Board would like to have the guidance from FEMA
16 as to how they deal with reasonable assurance and relationship
17 to NRC, and I think it's relevant.

18 I didn't care much for that particular hypothesis
19 because there's too many weaknesses in it.

20 MR. DIGNAN: I want to make a form objection, it's to
21 the words "lousy site." Now the reason for this, it's not just
22 for the pejorative content. It's because there is no site,
23 that I'm aware of in the country, where the NRC has permitted
24 the construction of a nuclear powerplant or its operation which
25 has not fully met the guidelines of 10 CFR 100.

1 Now, when you start throwing words like "a lousy
2 site" around, that's the problem. I suggest that the question
3 be required to be, assume NRC has ruled the site meets 10 CFR
4 100, then what follows. Because I have a real problem --

5 JUDGE SMITH: That's implicit in everything that we
6 talk about here. But let's let him have his hypothesis and
7 let's --

8 MR. DIGNAN: Yes, but what does "lousy" mean in that
9 context, Your Honor. That's a plastic word in any
10 conversation, and it is more than plastic in a legal question,
11 especially when a witness is now being asked to say, what
12 position will you take if everybody agrees the site is --
13 Presumably-- I'm very serious about this-- no one at the
14 Nuclear Regulatory Commission is going to be arguing for a site
15 or a plan to be allowed at a site if the site doesn't mean 10
16 CFR 100. There wouldn't be anything there.

17 JUDGE SMITH: Mr. Dignan, you don't have to argue
18 100. We've gone through that and I think everybody has an
19 understanding. I think the question assumed that, but doesn't
20 make it clear.

21 Mr. Backus, you work on that question, but you can
22 pursue the concept.

23 MR. BACKUS: I did not say "lousy site," I was using
24 Mr. Flynn's --

25 JUDGE SMITH: Lousy --

1 MR. BACKUS: -- description which he said, it was
2 partly in jest but had a kernel of seriousness to it, that you
3 take a site where there are lousy evacuation times, lousy
4 shelters.

5 BY MR. BACKUS:

6 Q And I'm asking you if you have a site that has
7 evacuation times similar to those that we're dealing with at
8 Seabrook, the sheltering problem similar to those that we're
9 dealing with at Seabrook, and an NRC person who is an
10 authorized person is telling you that the plans are adequate;
11 does FEMA have the independent right to say, no, they're not?

12 MR. FLYNN: Objection. First of all, I have to
13 respond to your reference to my remarks about lousy sheltering
14 and lousy evacuation times. At the time that I said them I
15 made it clear that I was not representing my views or FEMA's
16 views, I was attempting a facetious paraphrase of the views of
17 everybody in the case, although not individually.

18 MR. DIGNAN: What?

19 MR. FLYNN: It was in context -- Tom, I know you
20 don't agree with that, and that's my point.

21 It was in the context of attempting to work out a
22 stipulation.

23 JUDGE SMITH: I remember the context.

24 MR. FLYNN: Right.

25 JUDGE SMITH: It was -- so even given that --

1 MR. FLYNN: My other objection goes to the question
2 which has just been put to Mr. Cumming and that is, he's been
3 asked to assume that the NRC tells him that the plans are
4 adequate, and that's not established in this record.

5 MR. BACKUS: It's a hypothetical question.

6 JUDGE SMITH: How --

7 MR. FLYNN: It's not even established in this record
8 that it should happen.

9 JUDGE SMITH: He wishes to establish what the effect
10 of such an NRC position would be --

11 MR. REIS: Mr. Chairman, in that --

12 JUDGE SMITH: -- on the FEMA, and I think he has to
13 get his hypotheses in a row before he can do it, and he has
14 doesn't done it yet.

15 MR. REIS: Yes. I mean, there's a difference between
16 the NRC's role in the RAC where it's a part of a collegial body
17 and Mr. Bores or whoever it is speaks there. And it's a final
18 determination of the agency through the Boards or if there is
19 no Board finally made by the staff on the adequacy of the
20 plant. And we're working towards that here.

21 I think the question was that they heard off the cuff
22 from somebody that the NRC thought this plan was great and that
23 therefore that binds or from a lower level in the staff that
24 the plan was great and therefore that binds the whole agency
25 and binds FEMA as well. And we don't have that situation here.

1 Therefore the question is so vague as to -- because
2 of these -- this lack of knowledge of what he's talking about
3 is so vague as to be meaningless and can't be answered.

4 JUDGE SMITH: Mr. Backus, one of the difficulties of
5 your question is that you require the witness to assume that
6 lousy evacuation times fail to meet some standard for
7 evacuation times, and lousy sheltering fail to meet some
8 standard for sheltering. And that's not an assumption that he
9 may or may be willing to accept in his question.

10 However, we call upon your creativity to come up with
11 a hypothesis that will have tried to establish a relationship
12 between the position of the NRC staff with respect to these
13 issues and the impact upon FEMA.

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14 (Continued on next page.)

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T47 1 MR. BACKUS: Let me try it this way.

2 BY MR. BACKUS:

3 Q Mr. Cumming, if NRC has determined for a particular
4 site that its regulatory requirements are met in 50.47(a) and
5 (b), does FEMA have any independent right to reach a finding
6 that the standards are not met?

7 MR. REIS: Mr. Chairman, I object to the question.

8 MR. FLYNN: And I object, too.

9 MR. REIS: It presumes that there is a final
10 determination of the NRC before FEMA has its input. And the
11 regulations don't read that way.

12 MR. BACKUS: All I'm trying to find out, Your Honor,
13 is what the agency, through its new testimony, and we're all
14 aware that there has been quite an evolution here, what they
15 think their proper role is here in providing under 50.47(a),
16 findings and determinations, what their role is. That's what I
17 want to know.

18 MR. SCINTO: Sounds like a good question.

19 MR. FLYNN: I want to be heard on my objection.

20 MR. SCINTO: Ask it.

21 JUDGE SMITH: Well --

22 MR. FLYNN: My objection goes to this. That the
23 predicate or the hypothesis is that NRC tells FEMA we think the
24 NUREG-0654 criteria are met at this site. So FEMA, you do
25 whatever you want, but make sure it's consistent with what we

1 told you.

2 But the discussion and the testimony that we've
3 prefiled and the discussion on this record is not to that
4 effect at all. The issue has been what is the effect of an NRC
5 staff or Commission interpretation of its regulation, which is
6 by its nature generic. And then given that generic guidance,
7 then how does FEMA apply it.

8 That's very different from saying NRC tells you this
9 site is okay, or not okay.

10 JUDGE SMITH: Assume, contrary to fact, assume that
11 you received a letter at the direction of the Executive
12 Director for Operations of NRC from Mr. Scinto telling you that
13 contrary to your belief, FEMA, that there are two standards
14 that have to be met under the NRC emergency planning rule.

15 One is you've got to meet the 16 planning standards
16 of Paragraph (b).

17 The other, as a separate standard to be applied upon
18 the entire factual situation, you must find that there's
19 reasonable assurance that the emergency plans have adequate
20 protection for the public will be afforded.

21 As contrary to your belief, would you feel bound by
22 that?

23 Let's further assume that no more justification for
24 that position is given other than I've given it to you, and
25 it's just a naked position, a naked interpretation.

1 THE WITNESS: (Cumming) My argument -- I would
2 argue that FEMA is -- has independent judgment on whether the
3 standards have been met. Whether that's acceptable --

4 JUDGE SMITH: The standards.

5 THE WITNESS: (Cumming) The standards.

6 JUDGE SMITH: Okay.

7 THE WITNESS: (Cumming) Whether that is ultimately
8 upheld, rejected, reversed, modified by the Commission in a way
9 is of no interest to FEMA.

10 JUDGE SMITH: But that's a factual determination.

11 THE WITNESS: (Cumming) Yes.

12 JUDGE SMITH: A factual determination that the
13 standards have been met.

14 THE WITNESS: (Cumming) That's correct.

15 JUDGE SMITH: Now I'm talking about a regulatory
16 interpretation.

17 THE WITNESS: (Cumming) We basically now, I think,
18 have all arrived at the conclusion that I have argued since
19 last June. That to the extent the NRC had reached a definitive
20 position on an issue, either through a full Commission decision
21 or a rule, or a licensing board decision, that FEMA was
22 obligated to the extent possible to try and follow that
23 decision. It would not independently somehow reargue, try and
24 restate, try and wriggle out of it.

25 And I have to say that there are opinions all

1 different ways on this issue, because there are some licensing
2 board decisions I'm sure the Staff would love to have us
3 follow, and there are some they'd love to have us not follow.

4 But my consistent advice has been, and I believe it's
5 the agency's position, to the extent that there is a definitive
6 position out of the Commission for its adjudicatory process,
7 that it is binding on FEMA.

8 JUDGE SMITH: So the hypothesis that I gave you that
9 Mr. Scinto wrote a letter on behalf of the Executive Director
10 for Operations, that would not do it for you.

11 THE WITNESS: (Cumming) That's correct.

12 JUDGE SMITH: Okay.

13 MR. SCINTO: I doubt that Mr. Scinto would send such
14 a letter.

15 BY MR. BACKUS:

16 Q On the March 14th testimony, Mr. Cumming, on Page 7,
17 second paragraph, testimony says, "This testimony reflects that
18 realization," no minimum dose savings is the reference, "as
19 well as a deference to the NRC staff on its interpretation of
20 the requirement for a range of protective actions."

21 Correct?

22 A (Cumming) That's correct.

23 And as you remember, I corrected that. I said when I
24 adopted this testimony, if I ever did, I would correct that to
25 say "and Commission".

1 Q Okay. But in fact it's your opinion that FEMA should
2 defer to NRC staff as well as the Commission; isn't that so,
3 the Commission or its adjudicatory tribunals?

4 MR. REIS: Mr. Chairman, I'd like -- I object to the
5 question as being vague, because when he says defer to the
6 staff or the Commission, I'm not sure whether he's referring to
7 particular interpretations on particular plants or generic
8 interpretations.

9 JUDGE SMITH: It's a very broad question.

10 MR. BACKUS: Well, if you look at the testimony of
11 June 10th or March 14th, numerous of these items in the
12 chronology refer to things such as letters from Sherwin Turk of
13 November 30th and February 18th as being influences that caused
14 FEMA to evolve into the present position.

15 JUDGE SMITH: Well, can we put it in the context?

16 I think one of the elements that should be put on the
17 floor here when these questions are put to Mr. Cumming is that
18 the memorandum of understanding that is still operative now
19 requires the two agencies to cooperate together to the extent
20 that they can to present testimony in hearings.

21 And I would assume that that would suggest a give and
22 take and, you know, some type of deference or whatever to
23 arrive at a common testimony if possible.

24 Is that what you're getting at? To what extent would
25 they defer to the staff?

1 THE WITNESS: (Cumming) Judge Smith, maybe I can
2 help the Board out on this, and Mr. Backus.

3 Everyone in FEMA is fully aware of 10 CFR 50.3 with
4 respect to interpretations. I drafted that sentence. I should
5 have put in Commission.

6 The purpose of it was to point out that there are --
7 there was information available to FEMA from a variety of
8 sources. If out of the blue a staff interpretation showed up
9 that flat out reversed a Commission decision, FEMA is not going
10 to be influenced by it.

11 However, if FEMA receives a staff interpretation
12 which it believes is consistent with Commission position or
13 regulations, then obviously it's going to lend weight to it.
14 We are fully cognizant of the fact that 10 CFR 50.3 exists, as
15 I believe everybody in the Commission and the General Counsel's
16 staff is fully aware of it.

17 JUDGE SMITH: All right, let me point out an
18 exception here. 50.3.

19 MR. DIGNAN: He's got the purple book, too.

20 MR. BACKUS: Mr. Cumming -- is there a question
21 pending?

22 I should ask, right.

23 BY MR. BACKUS:

24 Q Mr. Cumming, you have previously testified, have you
25 not, that in your opinion FEMA's regulations, which closely

1 parallel as you've said NRC regulations, your regulations at
2 44 CFR 350.5(a) and (b) are procedural only, correct?

3 A (Cumming) That is my opinion.

4 Q Okay.

5 A (Cumming) Professional opinion.

6 Q And you said in your deposition, and I take it it's
7 still your belief that FEMA doesn't regulate anybody.

8 A (Cumming) That's correct.

9 Q And you've testified that if there is --

10 A (Cumming) In fact, Mr. Backus, the comments -- I
11 have since my deposition reviewed the comments which came in on
12 the FEMA regulation when it was first finalized, and I would
13 point out or reinforce that, that the following discussion
14 which occurred in the publication of the regulation, and I'm
15 happy to bring it to your attention or anyone else. We can
16 bind it in the transcript.

17 A comment came in. FEMA should use different
18 language throughout the rule to reflect both FEMA and states'
19 proper relationships to local governments. Specifically the
20 word should, shall, and will need to be replaced by the phrase
21 are encouraged to, or requested to affects many sections in the
22 rule said discussion.

23 This recommendation is made on the basis that neither
24 FEMA nor states can mandate any actions to local governments
25 except under specific emergency powers. A change in the

1 language as indicated will reflect the proper role of both FEMA
2 and the states with the local governments.

3 Response. There was a change -- the present language
4 reflected the FEMA relationship to both state and local
5 governments.

6 I believe to the extent there is mandatory language
7 in the regulation, it is incorrect, but I was not the reviewer
8 on the rule, if it does exist. And I think --

9 Q And you do --

10 A (Cumming) -- that may have created a misimpression
11 in FEMA that they were somehow regulating.

12 We are not a regulator, and the states and local
13 governments voluntarily participate in emergency planning.

14 Q You do acknowledge that there is mandatory language
15 in the FEMA regulations we've referred to.

16 A (Cumming) I would argue that there is, and it's
17 incorrect.

18 Q Okay. There is also regulations in -- a requirement
19 in your regulations, is there not, for -- and I'll let you
20 refer me to it because I'm sure you know it better than I -- a
21 governor of a state in submitting a plan to FEMA for review has
22 to certify that in the opinion of the state it provides
23 reasonable assurance of adequate protection.

24 Is that not correct?

25 MR. FLYNN: Excuse me. I object to the extent that

1 the question is asking for Mr. Cumming's opinion of what is in
2 the regulations. It's calling for legal conclusion. It's
3 calling -- I mean the regulation says what it says.

4 MR. BACKUS: He just disagreed with what it says, and
5 he volunteered that. I think he certainly opened it up.

6 JUDGE SMITH: Yes, I didn't understand --

7 MR. FLYNN: -- anything more than legal
8 argumentation.

9 JUDGE SMITH: I beg your pardon?

10 MR. FLYNN: I object that this is legal
11 argumentation.

12 JUDGE SMITH: Well, that type of objection has been
13 made from the very first day this hearing opened, and we've
14 always dealt with it pretty much the same way when you've got a
15 witness like this.

16 I think the objection could be made on relevance. I
17 don't understand what's the relevance of that question to
18 anything that we're doing.

19 MR. BACKUS: Well, the witness --

20 JUDGE SMITH: Are you going to go into a debate with
21 him whether they're a regulator?

22 MR. BACKUS: ... What he is now testifying to is
23 that in his opinion FEMA has no substantive regulations at all.
24 I'm going to explore that with him, because I think it's a
25 critical part of what FEMA is now -- what its current position

1 is.

2 JUDGE SMITH: Well, this --

3 MR. BACKUS: That they have no substantive
4 regulations on which to determine whether a plan is adequate.
5 That they are -- you know, I'm sure it can be explored further
6 with him, but that's what I understand his testimony to be.

7 JUDGE SMITH: Well, I think that a question and
8 answer approach that's going to be very belabored because I
9 don't know if you share a meaning on what you mean by
10 substantive regulation, and regulators, and that type of thing.
11 You're the one that has the time problem.

12 MR. BACKUS: All right.

13 JUDGE SMITH: Do you have --

14 MR. BACKUS: Oh, I have a question pending.

15 JUDGE SMITH: -- any enforcement authority?

16 THE WITNESS: (Cumming) Absolutely none.

17 BY MR. BACKUS:

18 Q Isn't there in fact a regulation that requires a
19 governor or his designee to submit to FEMA a statement that the
20 plans provide reasonable assurance of adequate protection when
21 they are submitted for review?

22 MR. FLYNN: Mr. Backus, if that's in the regulation,
23 why don't you simply point it out to us.

24 MR. BACKUS: Because he knows them better than I do,
25 and I'm trying to short-circuit so I don't have to search

1 through here.

2 THE WITNESS: (Cumming) Under 44 CFR Part 350, there
3 is a requirement that if a governor wants to have FEMA review
4 its plans, and that determination is voluntary, okay, the
5 governor should ship in with that plan a certification that in
6 his or her opinion there is reasonable assurance with respect
7 to protection of the health and safety of the public. And that
8 is in the regulation.

9 MR. BACKUS: Okay. All right.

10 MR. DIGNAN: Mr. Backus, so we don't get an
11 incomplete record, could the witness be asked if it also could
12 be the governor's designee?

13 MR. BACKUS: Sure.

14 THE WITNESS: (Cumming) The answer is, yes, it can
15 be. FEMA has consistently accepted the certification of
16 appropriate delegates with respect to that certification.

17 MR. BACKUS: All right.

18 BY MR. BACKUS:

19 Q All right now, I was going through the chronology
20 that you had set forth in your direct testimony, and I had
21 gotten through two points, I think, that were not in the
22 chronology which led us into some of these other discussions.

23 I note that also in your chronology you make no
24 reference to the meetings held at FEMA on June 2nd and June 4th
25 regarding the filing of the agency position; is that correct?

1 A (Cumming) I don't believe I've referred to any NRC
2 meetings in the testimony.

3 Q Okay. And that would include the meeting of January
4 19th that was attended by Mr. Stello, the Executive Director
5 for Operations.

6 A (Cumming) That's correct.

7 Q You've omitted that.

8 A (Cumming) That's correct.

9 Q Okay. And is it therefore to be taken that in your
10 view the evolution of the FEMA position was not importantly
11 influenced by any meetings or meetings with NRC?

12 A (Cumming) I think, other than the decisionmakers
13 themselves, I more than any other person truly believe that.

14 Q All right. Now, although you don't mention the
15 meeting of January 19th --

16 A (Cumming) Incidentally, I will not say that the NRC
17 meetings didn't have an influence on lower level people. They
18 may very well have. In fact, it's my belief they did have.

19 Q All right. What sort of an influence?

20 A (Cumming) Well, there is a lot of day-to-day
21 interface on the REP program. And I'm sure there are people at
22 NRC that thought we were idiots for some of the positions we
23 are taking.

24 I personally believe that all the positions that FEMA
25 took each step of the way were arrived at in good faith, with

1 the best understanding of the agency officials. They were
2 considered positions and they were decided in that way. And
3 NRC was not an influence, in my judgment, on any of those
4 decisions at any step of the way.

5 It's not say that there aren't people made
6 uncomfortable. Some people have a much lower tolerance for
7 people harassing them than maybe I do, or other people within
8 FEMA do. And I think that that may have occurred. Actually it
9 occurs both ways.

10 I think we have given our fair share of abuse to NRC
11 at the lower level, or even among legal staff.

12 Q Have you done that?

13 A (Cumming) Absolutely.

14 Q Oh, yes?

15 A (Cumming) But I treat other lawyers as appropriate
16 targets of whatever sparring is necessary to assert and defend
17 my agency.

18 Q Now another thing that you do not mention in your
19 chronology here is the events that occurred before this Board
20 on January 13th of 1988. And you're aware that there was a
21 hearing before this Board on that date; is that correct?

22 A (Cumming) I disagree with that, by the way, and
23 that's one of the reasons I insisted that I put in all events
24 occurring on the record during the course of these proceedings
25 on Page 7.

1 Q Okay.

2 A (Cumming) I believe that the conduct of this hearing
3 and the events that transpired during this hearing had a
4 significant impact on FEMA and its understanding of the issues.

5 Q All right. You're now referring to a sentence that
6 was added in the June 10th testimony that was not in the March
7 14th testimony which is found on Page 7, right?

8 A (Cumming) I'm looking at June 10th.

9 Q Right. And added there is a statement that had not
10 previously appeared, that among the significant things were
11 "all events occurring on the record during the course of these
12 proceedings to date", right?

13 A (Cumming) Absolutely.

14 Q And one of those significant events was what happened
15 on January 13th; is that right?

16 A (Cumming) The events of January 11th, 12th and 13th
17 in this hearing, with the exception of the voir dices of Mr.
18 Thomas on October 7th, November 4th, and the Sholly ruling were
19 perhaps the most significant of the entire course of events, in
20 my judgment, on FEMA.

21 MR. FLYNN: Mr. Backus, for the sake of the clarity
22 of the record, could I ask that the witness specify what those
23 events were?

24 MR. BACKUS: Just a second. I want to get this down.
25 Can I have his answer back?

1 (Accordingly, the record was read back by the
2 court reporter.)

3 (Continued on next page.)

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1 MR. BACKUS: All right. You got something you want
2 to say?

3 MR. FLYNN: Yes. My comment at the end of the answer
4 was for the sake of the clarity of the record, could I ask the
5 witness to specify what those events were.

6 MR. BACKUS: I'd rather have my examination proceed
7 and leave this for recross. I'll probably get to it.

8 MR. DIGNAN: Mr. Backus, just for my benefit and the
9 record, what -- 11, 12 and 13. I don't want any detail. I
10 honestly don't have the memory of what those dates signify.

11 MR. BACKUS: That was --

12 JUDGE SMITH: Mr. Backus, yes, it would be helpful if
13 we could --

14 MR. DIGNAN: Just what hearing room and what basic
15 subject, Mr. Backus, would really help me.

16 MR. BACKUS: It was the -- actually surprised you
17 don't remember it. This was the Board-supervised deposition of
18 Bores and Thomas.

19 MR. DIGNAN: That's correct. Is that what you're
20 referring to?

21 MR. BACKUS: At least on 12 and 13. I'm not sure
22 about 11.

23 THE WITNESS: (Cumming) May I consult with counsel a
24 minute?

25 MR. BACKUS: Sure.

1 JUDGE SMITH: Eleven was -- there was also a
2 milestone on the 11th, but I forget.

3 (Witness and counsel confer.)

4 THE WITNESS: (Cumming) If it's of help the Board,
5 there is Monday the 11th and the transcript.

6 MR. BACKUS: All right.

7 MR. FLYNN: Your Honor, if I bring up the image of
8 the oceanliner turning, I think that would --

9 MR. DIGNAN: Yes.

10 MR. FLYNN: -- remind you of what happened on January
11 11th.

12 MR. DIGNAN: Thank you, Mr. Flynn.

13 MR. FLYNN: I hesitated to do that, but I thought it
14 was important to establish a context.

15 MR. BACKUS: And hold those metaphors.

16 BY MR. BACKUS:

17 Q Mr. Cumming, you have now elucidated something I was
18 going to get to, and this sentence that you've added about all
19 events, and you've identified certain things.

20 Does that capture the major events that are
21 encompassed within our statement, "all events occurring on the
22 record"?

23 A (Cumming) Yes.

24 Q Okay. Now, with regard to the first item that --

25 A (Cumming) Well, I shouldn't say -- certainly the

1 events of the last two weeks in the hearings have been
2 significant, and it reenforced my view, because I had no way to
3 put Mr. Peterson and Mr. McLoughlin under oath, or Mr. Krimm.
4 I didn't know whether there had been some abuse of the process.
5 Their testimony under oath confirms, to the extent I had an
6 understanding, that they were not influenced improperly by NRC.
7 And I would say that is significant.

8 I think if they had said under oath, yeah, I was
9 influenced, there would have been a problem for me.

10 Q Would have been very surprised, too.

11 A (Cumming) Because everything I saw in the system was
12 perfectly legitimate, and I'm more than happy to explain to
13 this Board, which I think is entitled to an explanation, and
14 one of the reasons why I am a witness, is that there was a
15 significant legal play from June on that impacted on FEMA's
16 decisionmaking.

17 Q All right.

18 A (Cumming) And without my becoming a witness, you
19 would not have that in the record.

20 Q All right, we're appreciative.

21 Now, with regard to January 11, 12 and 13, was the
22 significance of January 11th what Attorney Flynn just referred
23 to, the fact that he had an oceanliner that he suggested might
24 be turning around?

25 A (Cumming) Not in my judgment.

1 Q Okay. On January 13th, you testified in your
2 deposition, and I'm looking at Page 38 of Volume 2, a lot had
3 happened in January. I believe I identified. In fact, I made
4 a large number of copies of the transcript of January 13, 1988,
5 where I believe the issues were laid out clearly by Judge
6 Smith, by the parties and I believed it was helpful for people
7 to understand what had transpired at the hearing.

8 Correct?

9 A (Cumming) Absolutely.

10 Q Did you just take any day and make large copies of
11 transcripts, or was January 13th a particularly significant
12 day?

13 A (Cumming) I made extracts from the 11th. I'm not
14 sure about the 12th. The reason the 12th was significant is
15 late in the afternoon Bores and Thomas were put on in a
16 "deposition". And the 13th was largely consumed by that
17 continued deposition.

18 Q All right. What was so significant about the 13th
19 that it caused you for that day to make large numbers of
20 copies?

21 A (Cumming) For a long period of time, and I'm about
22 to violate Mr. Flynn's admonition to me to give short answers,
23 I have stated the following principles with respect to
24 operations of the RAC and reversal of a position of a RAC, or
25 reversal of the positions of the RAC chairman, or reversals of

1 the position of a regional director, or reversals of the
2 position of an associate director, and the principle is as
3 follows.

4 Q Well, wait a minute.

5 A (Cumming) We are an administrative agency.

6 Q Wait a minute.

7 I'm going to join Mr. Flynn and ask you to give short
8 answers. And if I can, can I just ask you, is it the
9 relationship --

10 MR. DIGNAN: Mr. Backus, you asked him why did he
11 consider it significant, and now you're going to hear.

12 MR. BACKUS: All right, I'm sorry. I'm just trying
13 to save a little time.

14 This is not --

15 (Simultaneous conversation.)

16 MR. FLYNN: It is responsive.

17 MR. BACKUS: I don't think it's the least bit
18 responsive, but go ahead.

19 THE WITNESS: (Cumming) A RAC chairman has the
20 absolute right and prerogative under our administrative and
21 regulatory scheme to reverse the members of the RAC. But in
22 order to do so he must produce documentation and a detailed
23 rebuttal of why he disagrees with the position of the RAC, or
24 the individual RAC members in order to reverse them.

25 A regional director can reverse a RAC director, a RAC

1 chairman. But to do so he again must do it on the record. He
2 must state his reasons. I'm not saying they have to be most
3 extensive in the world, but he must state his reasons on the
4 record so that you have the appropriate administrative record.

5 The associate director for SLPS may reverse the
6 regional director, and all permutations and combinations
7 thereof, but he also must do it -- that reversal -- on the
8 record.

9 The director of FEMA may reverse the associate
10 director. He also must do it on the record and state his
11 reasons for so doing.

12 As far as I'm concerned, that's black letter
13 administrative law -- on the record.

14 What had happened is that there was an apparent --
15 some of these things I know about only because of reading the
16 transcripts, and other things. There was a RAC meeting in
17 October '86; April 15, 1987; July 30, 1987; January 7th and 8,
18 1988; February 29, 1988; and also on May 25, 1988, concerning
19 the New Hampshire plan.

20 Prior to January 13th, I believed that we did not
21 have reliable, probative evidence on the record of what had
22 transpired at the RAC meeting of July 30th, or even of April
23 13th. And I felt that it was of significance for the first
24 time we had Bores and Lazarus under oath stating what had
25 transpired to the extent that they had memory of what had

1 occurred in those two meetings.

2 We also had something significantly different with
3 respect to January 7th and 8th. Although I had advocated --

4 MR. BACKUS: Your Honor, this is just --

5 THE WITNESS: (Cumming) -- and it was rejected --

6 MR. BACKUS: -- I mean --

7 THE WITNESS: (Cumming) -- that that be transcribed,
8 Mr. Flynn was in attendance, and I had some understanding of
9 what Mr. Flynn understood had gone on. That's why I found it
10 significant. We knew what was on the record.

11 JUDGE SMITH: Mr. Backus, part of the problem is
12 you're probing the events which formed FEMA's position, and
13 they may not always be as simple as you might like. I don't
14 know what you can do about it.

15 BY MR. BACKUS:

16 Q Mr. Cumming, I take it then that what was significant
17 about the January 13th transcript was not what Attorney Flynn
18 said about this agency was only going to fine-tune its position
19 and not change it. That wasn't what caused you to make up
20 these copies and send them around.

21 Rather, it was discussion about what happened at the
22 RAC.

23 A (Cumming) That's correct.

24 And, incidentally, Attorney Flynn on Pages 8390 to
25 8398 on Monday had described his version of what had occurred

1 at the RAC meeting, and it comported with what he had told me.

2 Q I don't know whether you've copied this or not, but
3 at Page 8960 of the transcript of January 13th Attorney Flynn
4 said, and I quote, "I've talked with the people in Washington
5 since then and I mean again, I'm not prepared to say what the
6 details will be, but I've gotten a very clear indication that
7 the position we will be taking is that which we have already
8 stated."

9 See that?

10 A (Cumming) Yes, I do.

11 Q Were you one of the people in Washington with whom
12 Mr. Flynn talked prior to making that statement?

13 A (Cumming) No.

14 Q Was that part of the transcript that you copied and
15 sent out to the people you sent it out to?

16 A (Cumming) Yes.

17 Q Was that a significant statement, in your opinion?

18 A (Cumming) Yes, and I have it asterisked in my normal
19 style and underlined and folded over so I'd be able to find it.

20 Q Okay. Do you have any knowledge as to who in
21 Washington authorized Mr. Flynn to make that statement?

22 A (Cumming) I have no direct knowledge of the events
23 of that week except what transpired in the transcript.

24 Q Okay.

25 A (Cumming) I was not involved.

1 Q All right, now, let me turn now to the agency
2 position as filed on June 4th, refiled as prefiled testimony on
3 September 11th.

4 You have testified in your deposition that at the
5 time that position was filed you were prepared to support it as
6 a legally defensible position; is that correct?

7 A (Cumming) Absolutely.

8 Q Okay. And let me just go back to something you said
9 just before our morning break in regard to the January 25th
10 testimony, and the statement in there about reasonable
11 assurance being a separate test from NUREG-0654.

12 And you said that although that was not the better
13 legal opinion, you still thought there was legal support for
14 that opinion at the time that testimony was filed; is that
15 correct?

16 A (Cumming) I'm going to answer yes, and I have to
17 explain further.

18 Q Of course.

19 A (Cumming) Throughout the period June '87 through the
20 time of the filing on January 25th, in various meetings I heard
21 various arguments was the reasonable assurance a separate test;
22 was there a separate standard of judgment.

23 Some people argued that there was a separate test.
24 Some people said, no, all that means is that when you are
25 making a determination as to whether the standards are met, you

1 are applying the criteria of NUREG-0654, and because some of
2 them are not that precise you do -- there is an element of
3 professional judgment involved.

4 Now I have heard a variety of theories, and if the
5 Board wants to hear the variety of theories that went around in
6 FEMA on its own regs, I am more than happy to try and document
7 them to the extent I have memory.

8 Q I don't intend to ask you about them.

9 A (Cumming) Fine.

10 Q If the Board wants to, they will.

11 All right. So my understanding is that you felt on
12 June 4th that the agency position as then filed on the beach
13 population was legally defensible.

14 As of January 25th you still felt it was legally
15 possible to argue that there was a two-tier test for measuring
16 reasonable assurance, correct?

17 A (Cumming) I would state, Mr. Backus, that it's
18 legally possible today, without being unethical. It's not the
19 best legal position, in my judgment, but it is possible to make
20 that argument.

21 Q And yet at some time between the filing on September
22 11th and the time you gave us your deposition on March 25th,
23 you came to the conclusion that the agency's position as filed
24 on September 11th was legally incorrect, right?

25 A (Cumming) Yes.

1 Q And therefore you have some things that occurred
2 subsequent to September 11th that you feel made the agency's
3 position as filed on September 11th legally insupportable.

4 A (Cumming) That's correct.

5 And when I say legally incorrect, legally
6 insupportable, I'm saying that the overwhelming weight is
7 contrary to that position.

8 Q Okay.

9 A (Cumming) I'm not saying that you cannot find
10 someone who is willing to make an argument.

11 Q Okay.

12 A (Cumming) And I think it's very important that this
13 point be brought out, because there has been a tradition in
14 FEMA which, without understanding that tradition and the
15 original assignment of FEMA, it makes it seem almost like
16 that's a -- what we did was nonsensical, and that's not true.

17 Q All right. The first thing that you mention, as I
18 understand it, Mr. Cumming, was the filing by Sherwin Turk of
19 the proposed NRC rebuttal testimony, right, of the things that
20 are subsequent to September 11th?

21 A (Cumming) Yes.

22 Q Okay. Now you recognize, of course, that Mr. Turk is
23 a staff lawyer, a lawyer for a party in this proceeding; is
24 that right?

25 A (Cumming) That's correct.

1 Q And I believe that the second thing you mention in
2 determining whether or not there was going to continue to be a
3 legally supportable position is the promulgation of the
4 Commission's rule change on November 3rd?

5 A (Cumming) No, actually I have the Bores memos and
6 Sholly, but Bores is not in appropriate sequence because the
7 agency didn't have the Bores memos of October 15th until later,
8 whenever they were served by Shep Turk on all parties.

9 Q All right.

10 A (Cumming) I think it was late December.

11 Q All right.

12 A (Cumming) That was of significance, however.

13 Q Okay. Let's turn to the Bores thing. Dr. Bores is
14 the NRC RAC member for Region 1, and not a lawyer with the
15 agency; is that correct?

16 A (Cumming) Dr. Bores is not a lawyer.

17 Q Okay. And yet you feel that his memorandum to
18 Attorney Turk of October 15th was a significant thing in
19 undermining the legal correctness of FEMA's position of
20 September 11th?

21 A (Cumming) Well, I haven't put the label that all of
22 these are legal, but I think there was significance to it, yes.
23 And --

24 Q Well, was it legal --

25 A (Cumming) -- I think I have explained already why.

1 Q All right. But I want to -- what I'm trying to
2 explore is why you came to the conclusion that the position
3 you'd signed off on of September 4 -- June 4 and September 11th
4 became legally unsupportable, or not easily supportable, if you
5 want to put it that way.

6 And does the Bores memo have anything to do with
7 undercutting the legal supportability of --

8 A (Cumming) Yes.

9 Q -- the prior FEMA position?

10 It does. How does it legally undercut the prior FEMA
11 position?

12 A (Cumming) Because it indicated that there was a
13 misimpression within FEMA way back in June with respect to both
14 Bores 1 and probably Bores 2 and the implications of those
15 documents for FEMA, including legally.

16 Q What was that misimpression?

17 A (Cumming) Going back to the December 31, 1985 memo
18 written by Ed Thomas, in my judgment, Ed Thomas inappropriately
19 asked the question, and this is my interpretation of that memo,
20 for some modification of the PRA, or the risk assessment for
21 the Seabrook plant. And that absolutely was outside the scope
22 of FEMA's regulatory scheme with respect to REP or its
23 administrative activities.

24 Q Am I correct, Mr. Cumming, that you would agree with
25 other opinions that have been expressed that for the purpose of

1 measuring the adequacy of emergency plans you assume the
2 probability of an accident within the spectrum that needs to be
3 considered as 1? It's going to happen, right?

4 A (Cumming) Absolutely.

5 Q Okay. And is that why you say you disagreed with Ed
6 Thomas asking for NRC to give you material pertaining to risk
7 factors peculiar to Seabrook?

8 A (Cumming) That is correct.

9 Q Okay.

10 A (Cumming) And Dr. Bores, in my judgment, compounded
11 that error by discussing containment in his eventual response.

12 Q Okay. You have no reason to doubt that that
13 containment discussion in the Bores 1 memorandum was an
14 important factor in the RAC meeting that discussed it on April
15 15th, do you?

16 A (Cumming) I have significant doubts about what
17 occurred at the RAC meetings of April 15th and July 30th. The
18 first RAC meeting for which I felt there was some certainty was
19 the meeting of January 7th and 8th.

20 Q All right. In any event, the Bores memorandum of
21 October 15th was of legal significance in that it stated that
22 there was no consideration as far as Dr. Bores, and to the
23 extent he's authorized, NRC is concerned, in regard to the
24 special features of the Seabrook containment?

25 A (Cumming) Well, it certainly gives the appearance of

1 being a self-serving statement. And I must admit that it's
2 only because of the events in this transcript that I have made
3 this connection. But there was a meeting between NRC and FEMA
4 on October 15th, and I think Dr. Bores was in the meeting as
5 well as Shep Turk. And I believe notes of that meeting were
6 released to the Intervenors in a FOIA or discovery request.

7 But what I find important about it -- whether it's
8 self-serving or not, I think that there is validity to that
9 memo, in my judgment, because it explained accurately that
10 there was no significance to the containment discussion.

11 Now, FEMA did not have that information from NRC
12 until late December.

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13 (Continued on next page.)

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1 Q Are you saying that you did not understand from
2 Bores 2 which we were told was furnished in June omitting
3 reference to containment, you didn't get from that that NRC
4 felt that the containment was not of significance to its
5 position as taken in the Bores letter? You didn't know that
6 until December?

7 A (Cumming) Okay, let me explain. My personal
8 involvement began on this issue June 2nd, 1987 when I was
9 called to a meeting with NRC. Based on my impression of that
10 meeting, my impression which could be inaccurate, there was no
11 discussion in that meeting from NRC that we were completely
12 incorrect to have relied on the containment discussion in Bores
13 1.

14 Q Nobody from NRC said that?

15 A (Cumming) That's right. But I believe that we were
16 significantly misled by someone not stating at that time, in
17 that meeting, and I understand there was a May 19th meeting
18 between NRC and FEMA which I was not a party to where this was
19 earlier discussed which may have been of significance. And I
20 believe at the time then to straighten it out, it could have
21 been straightened out in that meeting.

22 In fact, in the meeting I made some statements about
23 the fact that we could not find reasonable assurance, but we
24 also were backing off from the Christenbury memo.

25 Now, I think there was a distortion, though. I think

1 that everybody in the meeting understood that certain people in
2 FEMA felt containment was an issue. I personally believe that
3 I may have misled the people in that meeting by not picking up
4 on that issue right away.

5 Containment is not an issue in emergency planning.

6 Q All right. But you're saying that from your
7 participation on that June 2nd meeting, the first one you went
8 to, you understood that some people at FEMA did have that
9 impression?

10 A (Cumming) Absolutely.

11 Q Okay.

12 A (Cumming) And I was probably incorrect in not
13 pointing out to them that that was an erroneous approach.

14 Q And everybody at that meeting knew that the Bores 1
15 memo was being pulled and was going to be replaced by a memo
16 that would not reference the containment; is that true or not?

17 A (Cumming) I think we were told in the meeting that
18 there would be another memo whether, you know, as I said in my
19 deposition, no one knew there was a Bores -- Bores 1 didn't
20 become Bores 1 until there was Bores 2. I don't --

21 Q We understand.

22 A (Cumming) I've been told I will get things from NRC
23 before and never gotten them, and they've been told they will
24 get things from us and never gotten them. We're
25 bureaucracies, which this probably establishes more than any

1 other point.

2 Q All right. Going on from the September 11th filing
3 which you found to be legally supportable, we've covered the
4 Bores memo insofar as I want to, and there may be others, of
5 October 15th. We've covered Sherwin Turk's proposed rebuttal
6 testimony of October 5th. Am I correct that the next things
7 would be the NRC's rule change and its accompanying statement
8 of considerations of November 3rd and the Board's ruling on the
9 Sholly-Be/ea testimony of November 16th?

10 A (Cumming) Yes.

11 Q Okay.

12 A (Cumming) Actually the rule was made available by
13 the Commission on October 29th, and it was published in the
14 Federal Register on November 3rd.

15 Q And the significance of the rule change was that the
16 statement of consideration said, no minimum dose savings, no
17 minimum ETEs; is that right?

18 A (Cumming) That's correct. The statement of
19 considerations.

20 Q And that rule --

21 A (Cumming) Not the rule itself.

22 Q And as you know as a lawyer and you've mentioned it
23 in your chronology, you know that that was a Commission
24 decision, that principle was contained in a Commission decision
25 in Shoreham issues in July of 1986; right?

1 A (Cumming) July 25th, 1986 CLI-86-13.

2 Q So that was not a new principle;; is that correct?

3 A (Cumming) At the regulatory level it was a new
4 expression of that principle.

5 Q It was a new expression, because now it was going to
6 be a rule, statement of considerations instead of a decision;
7 right?

8 A (Cumming) And to that extent generic.

9 Q All right. Now, the Board ruling, bench ruling of
10 November 16th, Mr. Cumming, excluding the Sholly-Beyea
11 testimony, you have described that, have you not, as extremely
12 significant; correct?

13 A (Cumming) Absolutely.

14 Q And why was that extremely significant in rendering
15 the FEMA position as filed on September 11th, no longer legally
16 supportable?

17 A (Cumming) While the containment analysis and its
18 impression on FEMA might have been completely erroneous, the
19 Sholly prefiled testimony, in my judgment, was very close to
20 the arguments I had heard expressed by a number of people in
21 FEMA including Ed Thomas.

22 And to the extent that that argument had any
23 validity, after the date of the Board's ruling it had
24 absolutely no validity.

25 Q Is it fair to say, Mr. Cumming, that after you had

1 received and digested the Board's ruling of November 16th that
2 that was kind of the straw that broke the camel's back insofar
3 as being able, for you, to legally say we can support the prior
4 FEMA position?

5 A (Cumming) No. No. I -- if you want me to find the
6 straw?

7 Q Yes, find me the straw?

8 A (Cumming) Has to be part of my deposition, I know,
9 because I said I had already said that.

10 I would say that my earlier information base
11 confirmed by the Shep Turk letter was probably the straw that
12 convinced me.

13 Q Which Shep Turk letter?

14 A (Cumming) Of February 18th.

15 Q Why was the Shep Turk letter more crucial in causing
16 the FEMA position to become legally and supportable than the
17 Board's ruling?

18 A (Cumming) Because we had it in writing admittedly by
19 a staff attorney. But I knew that there had been some review
20 of the position, because as I stated in my deposition, I had a
21 conversation with Bill Olmstead which happens to be during the
22 January 19th meeting where he indicated that was certainly his
23 informal position. Informal in the sense that it did not
24 comply with 50.3 10 CFR. But I have a high level of respect
25 for a number of NRC attorneys including Mr. Olmstead.

1 And I believed that his overall judgment was
2 confirmatory of a position which I believe was first
3 established by Edward Christenbury, his memo in June '86 which
4 within a month the rationale was in part confirmed by the
5 Commission in CLI-86-13.

6 Q All right. Now, I want to turn back to the prior
7 FEMA position on page 39 as filed on June 11th; I think page 70
8 on the global numbering, if I'm not mistaken. And I want to
9 ask you very quickly, Mr. Cumming, with regard to the
10 statements made in paragraphs one through three, whether there
11 were any factual errors in light of present knowledge.

12 First of all, turning to paragraph one which
13 discusses the primary guidance document which is NUREG-0654,
14 FEMA-REP-1, is there any factual misstatement in that
15 paragraph? Well, let me be more precise in my question. Is
16 there any reason to believe that those statements are not
17 accurate today as they were when filed on September 11th?

18 A (Cumming) It attempts to be an accurate reflection,
19 and I think it is substantially an accurate reflection,
20 paragraph one of the NUREG.

21 Q Okay. Now, paragraph two speaks of, "On peak summer
22 days there are thousands of beachgoers in the Seabrook EPZ in
23 areas beginning approximately 1.7 miles from the plant." Is
24 that a correct statement today?

25 A (Cumming) You convinced me in my deposition that

1 it's certainly thousands, as to how many thousands, I'm not
2 certain.

3 Q And the sentence doesn't say, does it?

4 A (Cumming) It doesn't say.

5 Q All right. It says, "The current New Hampshire plans
6 contemplating evacuating the many thousands of beachgoers who
7 have access to no adequate shelter is a protective action in
8 the event of an accident at Seabrook." Is that an accurate
9 statement for today's plan?

10 A (Cumming) My testimony is premised on Rev. 2 with
11 the submissions through February. I understand that on April
12 22nd formal plan amendments were made which are under formal
13 review by the RAC; I am not familiar with those formal
14 amendments. I am familiar with the submissions through
15 February.

16 Q All right.

17 A (Cumming) To the extent that it says, plans -- the
18 plan prior to those amendments certainly said there was no
19 consideration of sheltering for the day trippers.

20 Q Okay. And isn't it still true today, even in the
21 light of the February submissions from the State, the February
22 11th, February 19th, that for the vast majority of accidents it
23 is not planned to shelter the day trippers who are not transit-
24 dependent?

25 A (Cumming) That's my understanding.

1 Q Okay.

2 A (Cumming) Are we still on that paragraph two?

3 Q Yes. The next sentence says, "We understand the
4 plans contain no consideration of sheltering the day trippers
5 because on summer days there are large number of people, of
6 these people, it is not possible to find reasonably accessible
7 shelter for them." Is that still a factually correct statement
8 today so far as you know?

9 A (Cumming) To the extent that has facts I would
10 disagree. I think that's a statement of opinion.

11 Q It says, "There are an additional number of persons
12 who would be in or have access only to shelter unwinterized
13 cottages and motel rooms." Is that a factually correct
14 statement today?

15 A (Cumming) I would agree with that.

16 Q And the last sentence says, "The protection afforded
17 by sheltering in these structures will definitely be less than
18 that afforded in a normal wood frame house."

19 A (Cumming) I would disagree with that.

20 Q You would?

21 A (Cumming) Yes. I'd like to defer to my expert on
22 sheltering, Mr. Keller.

23 Q Okay.

24 A (Cumming) But if you force me to explain I'll try
25 to.

1 Q I think I'll leave that for the next examiner.

2 The third paragraph says, well, I don't want to take
3 up the time to go through it sentence by sentence. Do you
4 agree, sir, that that sentence generally discusses the
5 evacuation time estimates and that there is now a controversy
6 about whether those time estimates for evacuation may be
7 understated?

8 A (Cumming) I was here when Mr. Thomas testified that
9 his knowledge, officially, FEMA had only used the Rev. 6
10 numbers. In my judgment, while that may be true at the RAC, I
11 think everyone who has considered this issue formally or
12 informally at FEMA has tended to agree that the numbers in Rev.
13 6 are low, and it's probably the numbers that come out of this
14 Licensing Board ultimately which will be the controlling
15 numbers. I certainly agree with that.

16 Q Okay.

17 A (Cumming) I think the Rev. 6 numbers are low and I
18 believe the Applicants and the State of New Hampshire have done
19 some work, I'm represented based on their filings with the
20 Board, to modify that Rev. 6 -- those Rev. 6 ETES.

21 Q So to the extent --

22 MR. DIGNAN: Your Honor, for clarity sake in the
23 record the witness has used the term "Rev. 6" and I believe he
24 means Rev. 2, Volume 6.

25 THE WITNESS: (Cumming) I'm sorry, Rev. 2, Volume 6.

1 MR. BACKUS: Thank you.

2 BY MR. BACKUS:

3 Q So, insofar as the facts stated in number three may
4 be incorrect, insofar as long evacuation times are worse than
5 short evacuation times, the facts may get worse rather than
6 better; is that fair?

7 A (Cumming) In my judgment that's fair.

8 Q Okay.

9 A (Cumming) People like the beach.

10 JUDGE SMITH: How are you doing with your time?

11 MR. BACKUS: I would think I probably got about
12 another hour to go and I can come back for that. So if you
13 want to take a luncheon break at this point, that's fine with
14 me.

15 JUDGE SMITH: We'll defer to your needs on it.

16 MR. BACKUS: Well, why don't I -- if it's okay with
17 you I'd like to take perhaps just a -- if it's okay with you
18 I'd just as soon try and go to 12:30 and see if I can finish.
19 If we could have maybe a two minute break now, which I do need.

20 (Whereupon, a brief recess was taken.)

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1 JUDGE SMITH: Go ahead, Mr. Backus.

2 BY MR. LACKUS:

3 Q Mr. Cumming, you recall that during the hearing at an
4 early point there was a motion in limine filed with regard to
5 the then proffered FEMA testimony?

6 A (Cumming) Absolutely.

7 Q And you would agree with Mr. Thomas's
8 characterization that how the agency should respond to that was
9 a cause celebre?

10 A (Cumming) Yes.

11 Q And did you argue the view that there should not have
12 been an opposition to that motion in limine?

13 A (Cumming) Yes.

14 Q But as you are well aware, the agency did on or about
15 October 30th file an opposition to that motion?

16 A (Cumming) That's correct.

17 Q When you say it was cause celebre, were you involved
18 in the discussions in FEMA in Washington as to whether the
19 agency should oppose or resist that motion?

20 A (Cumming) Yes.

21 Q And who argued that the motion should be opposed?

22 A (Cumming) Actually I don't think Mr. Flynn argued it
23 should be opposed. I think ultimately he deferred to the
24 program officials who felt that to somehow not oppose it was to
25 concede that the legal issue was paramount, and that there was

1 no program input to be made on this issue.

2 Q All right. Now on Page 7 of your testimony you've
3 added new material over what was there on March 15th.

4 A (Cumming) Yes, I did.

5 Q In particular, three items: An Appeal Board ruling
6 on the Seabrook litigation that came down in 1987; a Long
7 Island Lighting Shoreham decision that came down in May of
8 1988; and then what we've previously discussed, all events
9 occurring on the record. Well, there was a fourth item, the
10 renewal of the Sholly-Beyea ruling on May 10th, correct?

11 A (Cumming) That's correct.

12 Q Okay. Now the first item you've listed, the Appeal
13 Board ruling in ALAB-838, of course is something that predates
14 by about a year the filing of the FEMA position that became the
15 FEMA prefiled testimony in 1987; is that right?

16 A (Cumming) Over a year.

17 Q Yes. So you were aware of that at a time when you
18 signed off on the legal -- as legally on the FEMA --

19 A (Cumming) No.

20 Q You were not?

21 A (Cumming) I was not. I found out about the Board
22 ruling, and I consider myself negligent to not have run down
23 that April 29, 1986 Board ruling originally. Although it's
24 unpublished, I certainly should have run it down. And I
25 realized that it was of great significance when on April 26 the

1 Applicant filed its position on the contentions on the
2 Massachusetts side, and it basically cited to that.

3 And I had gone back originally in the published
4 rulings when I first got involved in the summer of 1987 on the
5 Seabrook issue, and looked at all the rulings I could find that
6 were published.

7 For some reason I even overlooked ALAB-838. I think
8 it's because the headnotes deal with the fact it was an
9 interlocutory appeal, whether or not that was appropriate.

10 To my great dismay, I found out that the rejected
11 Massachusetts AG contention, which the Appeal Board confirmed
12 the rejection of that by Judge Hoyt in this Board, was very
13 close in wording to the position we filed in June. And I was
14 extremely upset that I didn't know that and didn't know that in
15 June 1987.

16 Q All right. This Appeal Board decision, as you say,
17 states that it determines that the appeal was premature because
18 it was interlocutory. Isn't that the gist of the holding?

19 A (Cumming) That's correct, but the wording of the
20 contention except with the phrase "meteorology" was
21 substantially what FEMA filed on Page 39 in June 1987.

22 Q Okay. And did you also, in the course of reading
23 this, happen to note the last footnote in the opinion that
24 says, "Nothing in our discussion of the issues under
25 consideration by the licensing board should be construed as a

1 determination on our part of the merits of the issues to be
2 decided."?

3 A (Cumming) That's correct.

4 Q Okay. Now, the other thing that you mentioned that
5 came up was the Shoreham decision of May 9th, entitled partial
6 initial decision on suitability of reception centers, correct?

7 A (Cumming) That's correct.

8 Q And you cite that as a support for the proposition
9 that there is a range of protective actions even though
10 sheltering may not be a protective action in the case of
11 Seabrook for the beach population; is that right?

12 A (Cumming) In my deposition you showed some shock and
13 dismay, in my judgment, when I said that monitoring and
14 decontamination is within the range of protective actions.

15 That Board order confirmed that its own prior order
16 affirmed by the Appeal Board had fully determined that
17 decontamination, or monitoring and decontamination was within
18 the range of protective actions.

19 You had asked me to describe what were some of the
20 protective actions under the NUREG, and there was clearly
21 reinforcement of the position I had told you in my deposition.

22 Q Okay. In your opinion, that position supports that.

23 A (Cumming) Absolutely.

24 Q All right. We all recognize, I think, that at
25 Seabrook, with some -- with what are called few or minor

1 situations, that for the beach population the protective action
2 in the event of a fast -breaking, serious accident is going to
3 be evacuation under the New Hampshire plans; is that right?

4 A (Cumming) There are a variety of protective actions
5 under the New Hampshire plan.

6 Q All right.

7 A (Cumming) Evacuation is not the only protective
8 action.

9 Q You would consider other protective actions to be
10 such things, as I think you mentioned in your deposition,
11 access control, correct?

12 A (Cumming) Absolutely.

13 Q Okay. Will access control have a protective
14 capability if the accident occurs when the beaches are capacity
15 and there is no more parking space?

16 Will it still be a protective action?

17 A (Cumming) The merits or effectiveness of various
18 protective actions varies. Under the NUREG, there is in fact a
19 range. It is up to the decisionmaker to determine what's
20 appropriate.

21 Q Okay. Now you've mentioned monitoring and
22 decontamination at reception centers. Are you aware that under
23 FEMA guidance provided under signature of Mr. Krimm, as
24 discussed in the Shoreham decision, that the decontamination
25 and monitoring is targeted to deal with about 20 percent of the

1 population within EPZ?

2 MR. REIS: Mr. Chairman, I object. I don't
3 understand the relevance of what percentage is dealing with,
4 and what the relevance is generally of these questions.

5 JUDGE SMITH: Well, I think he's saying if you're
6 not -- if you don't get the benefit of the protective action,
7 then it's not a protective action.

8 MR. BACKUS: Right.

9 JUDGE SMITH: But if you take that to its extreme, if
10 you have an evacuation and there is never a release, then that
11 would not have been a protective action. I don't know how far
12 you can go with your argument.

13 BY MR. BACKUS:

14 Q Am I correct, Mr. --

15 BY MR. BACKUS: May I proceed?

16 MR. BACKUS:

17 Q Am I correct, Mr. Cumming, that for measuring -- for
18 assessing the adequacy of decontamination at reception centers
19 the guidance is that you anticipate about 20 percent of the
20 population will be appearing at those centers for
21 decontamination?

22 A (Cumming) This is my issue, and I raised it at
23 Shoreham, and that's an incorrect statement.

24 Q Okay. What does FEMA require that reception centers
25 be able to handle for decontamination?

1 A (Cumming) You use the term "decontamination".
2 There is no requirement both in terms of time or
3 numbers on decontamination.

4 What was determined was that in order to be judged
5 suitable, or adequate if you will, that the plan sponsor,
6 whoever that may be, must have personnel, equipment, et cetera,
7 capable of monitoring 20 percent of the total population of the
8 EPZ within about a 12-hour period.

9 Q Okay. thank you.

10 Mr. Cumming, with that explanation, you say that the
11 monitoring is a protective action; is that right?

12 A (Cumming) Absolutely.

13 Q All right. And you include the food protection
14 measures that are planned for the ingestion pathway, right?

15 A (Cumming) Yes.

16 Q And you have defined whether or not a plan achieves
17 dose savings as whether or not it achieves aggregate dose
18 savings for the entire population at risk, right?

19 A (Cumming) Could you repeat that question?

20 Q Well, how do you -- is it your opinion that in order
21 to be adequate a plan has to achieve some dose savings?

22 A (Cumming) My belief is that the objective is always
23 to achieve maximum dose savings for the entire population of
24 the EPZ.

25 In other words, when I say dose savings, I'm talking

1 about dose rates integrated over time for the entire population
2 of the EPZ. That's the objective.

3 However, if you took that to its logical extreme,
4 there is a decision, San Onofre, which would have you
5 constructing new facilities to some degree. That's not the
6 approach that's taken. You take what you have at the site.

7 And so the question is then, okay, what is the actual
8 legal requirement in our position; what is FEMA's policy or
9 regulatory position as to what must be achieved. And it would
10 be some dose savings to the entire population of the EPZ, plan
11 versus no plan.

12 In other words, the plan must achieve some dose
13 savings in the aggregate to the population of the entire EPZ.

14 Q Okay. Hypothetically --

15 A (Cumming) That doesn't mean an individual -- one guy
16 can walk out and not suffer doses and the plans' adequate.
17 It's aggregates.

18 Q Well, if one guy can walk out and not suffer
19 radiation injury, that's dose savings isn't it?

20 A (Cumming) But that is not what we use.

21 Q What do you use?

22 A (Cumming) I just said. It's aggregate doses of an
23 entire population of the EPZ, and it's dose rates integrated
24 over time.

25 Q Now I understand that nobody is going to agree that

1 this is a fact. But suppose it was a fact that the plan gets
2 one person out who would otherwise not get out and get a dose,
3 and that's the best you can do because the plant's in Boston
4 Common and earthquakes have leveled every building so there is
5 no streets available to get out, okay?

6 But because you got a plan, one guy walks away. Is
7 that dose savings?

8 MR. REIS: Objection. If Mr. Backus isn't willing to
9 accept his own hypothetical, I submit the question is
10 irrelevant.

11 MR. BACKUS: I'm trying to explore the standard that
12 Mr. Cumming is using here.

13 JUDGE SMITH: Well, just ask him if he see any limit
14 to the amount of dose savings that would meet the requirement.

15 THE WITNESS: (Cumming) No. In other words, there
16 is no minimum dose savings which must be achieved.

17 BY MR. BACKUS:

18 Q Mr. Cumming, you're, of course, very familiar with
19 the memorandum of understanding of April 15, 1985 between NRC
20 and FEMA; are you not?

21 A (Cumming) Yes, I am.

22 Q And you're aware that in that document FEMA is
23 described as having the lead in offsite emergency planning, to
24 review and assess offsite emergency plans?

25 A (Cumming) Yes.

1 Q And to your knowledge, that memorandum of
2 understanding still sets out the role FEMA should perform in
3 participating in review of emergency plans for nuclear
4 licensing?

5 A (Cumming) Does it still accurately set out the role
6 for FEMA, is that your question?

7 Q Well, is that memorandum of understanding still
8 outstanding?

9 A (Cumming) The memorandum is still in effect. I
10 think there are a number of areas where I would argue it is not
11 accurate.

12 Q So you have some quarrels with the memorandum of
13 understanding as you indeed do with the regulations at Part
14 350; is that correct?

15 A (Cumming) That's correct.

16 Q Now you mentioned early on that you did think that
17 the regulations were incorrect in using mandatory language.
18 But that did you mean the regulations were not properly
19 authorized, in your opinion?

20 A (Cumming) Yes.

21 Q Okay. So if we decided to attack them in the Court
22 of Appeals, do you think we'd win?

23 MR. FLYNN: Objection. That's clearly argumentation.

24 MR. BACKUS: That is, I agree, I agree.

25 MR. DIGNAN: You've got to argue it right first, Bob.

1 Otherwise, you lose.

2 THE WITNESS: (Cumming) I could argue if you win,
3 you'll lose.

4 MR. BACKUS: In other words --

5 (Simultaneous conversation.)

6 MR. BACKUS: -- regulations are unauthorized.

7 BY MR. BACKUS:

8 Q Let me turn, then, to the conclusion of your
9 testimony, and also the statements on Pages 2 and 3 about the
10 submissions from the State of New Hampshire on the sheltering
11 issue. And for the record, I think we understand we're talking
12 about the submissions of the state of February 11 and February
13 19, 1988, correct?

14 A (Cumming) That's correct.

15 Q And those submissions state, do they not, that in
16 certain circumstances the state may choose to use sheltering as
17 the protective action of choice; the primary protective action
18 of choice for the beach population?

19 A (Cumming) Yes.

20 Q Okay, and do you agree that as of this time there is
21 no plan that would meet the requirements of NUREG-0654 for the
22 sheltering of the beach population?

23 A (Cumming) Based on their submissions, Rev. 2, in my
24 opinion, was adequate to meet the requirements of NUREG-0654.

25 Q Okay. So in your opinion, unlike that expressed by

1 Mr. Thomas yesterday, you don't need to have specifically
2 designed EBS messages to direct people to shelter. You don't
3 need to have specific shelters identified for specific
4 segments. You don't need to have those sorts of things in
5 order to have reasonable assurance that the sheltering option
6 can be carried out with reasonable assurance; is that right?

7 A (Cumming) If you look at the last sentence on Page
8 11, my testimony reads, "At the same time, whenever this choice
9 is incorporated in the New Hampshire Radiological Emergency
10 Response Plan, implementing detail will be necessary."

11 I think you've asked me about the implementing
12 detail.

13 Q Okay.

14 A (Cumming) Our testimony is that it's adequate in
15 concept because -- and there's a very specific reason for it.
16 So I went through the fuss with Mr. Flynn about the contention.

17 The contention talked in terms of sheltering and
18 whether or not it said, before being modified to incorporate
19 both the state and local plans, it said the New Hampshire RERP
20 does not provide a reasonable assurance that adequate
21 protective measures can and will be taken in the event of a
22 radiological emergency as required by 10 CFR 50.47(a)(1) in
23 that the plan does not provide reasonable assurance that
24 sheltering is an adequate protective measure for Seabrook.

25 Q Well --

1 A (Cumming) But we don't do an overall plan finding
2 or reasonable assurance finding, on single elements.

3 Q All right. In using the words that you did there in
4 that last sentence, implementing detail will be necessary, you
5 don't intend to create any impression that that's not
6 important; that those details are minor items, right?

7 A (Cumming) The whole reason that is important, and I
8 do believe it's important, is that to the extent possible of
9 planning you want to plan and reduce, to the extent possible,
10 ad hoc responses.

11 But I will also state that basically the information
12 through February did in fact indicate that to some degree there
13 would be situations in which an ad hoc sheltering response, so-
14 called sheltering in place would be appropriate. And I believe
15 that is adequate in concept to meet the standards if the NUREG.

16 Q An ad hoc sheltering plan given these circumstances
17 is adequate.

18 MR. FLYNN: Objection. The question is nonsensical.
19 Anything that's ad hoc is not a plan.

20 MR. BACKUS: I certainly agree with that.

21 BY MR. BACKUS:

22 Q Treating sheltering on an ad hoc basis is sufficient
23 to have you agree that the New Hampshire plans for the beach
24 population are adequate; is that what you said?

25 A (Cumming) This may be an oversimplification but I

1 think it's accurate, Mr. Backus.

2 My testimony is that prior to all the convolutions
3 that we've gone through with this proceeding through February
4 and the February submissions is that there full consideration
5 given to sheltering, but in fact the plan, even prior to that
6 consideration, was in fact adequate on J-9 and J-10-M.

7 Q For the beach population.

8 A (Cumming) For the beach population.

9 (Continued on next page.)

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1 Q Okay. Just a few more things. First of all, you've
2 previously testified and I'd like to know if you still agree
3 that as far as NRC is concerned, in your opinion, if the plan
4 achieves some dose savings rather than maximum dose savings, a
5 plan can be adequate; is that right?

6 A (Cumming) The Zimmer decision, ALAB-727 said very
7 clearly that the objective of emergency planning -- objective
8 -- was a maximum dose savings. Some people, I believe, have
9 interpreted that to be the regulatory standard.

10 The NRC including in CLI-86-13 has used other terms.
11 They have used reasonable and achievable; reasonable and
12 feasible. The Christenbury memo, I believe, used two terms.

13 I don't -- I would not speak to what NRC standard is.
14 I would say that FEMA standard is that our objective is maximum
15 dose savings, but our standard is some dose savings for the
16 aggregate doses for the population of the EPZ.

17 Q So the objective is shooting higher than the standard
18 may require, and the standard for FEMA is some dose savings; is
19 that right?

20 A (Cumming) In my judgment.

21 Q All right. You also have expressed, and I take it,
22 it would still be your opinion that evacuation time estimates,
23 the length of evacuation time estimates is legally irrelevant
24 to a determination of plan adequacy; is that correct?

25 A (Cumming) Yes.

1 Q Now, we have a situation here at Seabrook, and if I
2 can put aside the situation where they may go to sheltering,
3 which is, I think we would agree, the State saying a very
4 limited number of possible scenarios where that might happen;
5 correct?

6 A (Cumming) Yes.

7 Q If we put that aside and the thing that's going to
8 happen at the beach when the gong sounds and the alarms go off,
9 that people are going to be asked to leave, is it true that the
10 evacuation time estimates are irrelevant because a
11 decisionmaker really has no choice about what they're going to
12 do, and the only purpose of an evacuation time estimate is to
13 help make a decision?

14 A (Cumming) The real purpose of the ETES as part of
15 the planning standard and the approach, the review criteria of
16 the NUREG is to try, to the extent possible, to get the most
17 accurate information possible into the hands of a
18 decisionmaker.

19 I think I testified at my deposition, you have the
20 poor guy or gal who is standing there, the time has come that
21 they must make a decision. They have various advisors, you
22 hope that they have the best information possible. ETES is
23 something that can be worked out in advance. There are
24 well-respected models concerning that; it's an important piece
25 of information.

1 And to the extent possible, planning -- advanced
2 planning should try to make sure that those ETEs are as
3 accurate as possible.

4 As to how in that decisionmaker's mind the ETE is
5 factored in, I would think it would depend on the expertise of
6 the decisionmaker and his or her advisors. I think it would be
7 extremely useful information, even in the Seabrook situation.

8 Q Even in the Seabrook situation where it's not one of
9 those situations where you're going to consider sheltering the
10 beach population?

11 MR. FLYNN: I object to the question. In one sense
12 it's misleading; in another sense it's irrelevant. The
13 question treats evacuation times as if they were only for the
14 Seabrook and Hampton Beaches. The evacuation times is for the
15 entire EPZ. Emergency planning is for the entire EPZ. The
16 judgments about reasonable assurance and adequacy of the plans
17 are for the entire EPZ.

18 Now, this contention focuses on those beaches and
19 that's appropriate. But the question is trying to lead the
20 witness to say, that because the decision to evacuate the beach
21 areas is virtually automatic. That the ETEs are worthless.
22 And I submit that that's misleading.

23 MR. BACKUS: Well, not worthless. I'm just asking
24 him -- well, let me just put it very directly.

25

1 BY MR. BACKUS:

2 Q We do require preparation of the evacuation time
3 estimates for the entire EPZ and various circles out to the 10
4 mile radius, do we not, Mr. Cumming?

5 A (Cumming) The ETEs are computed based on the last
6 car, essentially leaving the EPZ.

7 Q And we have ETEs, are fine, for certain segments of
8 the EPZ population, do we not?

9 A (Cumming) And I have said that they're extremely
10 valuable to the decisionmaker.

11 Q All right.

12 A (Cumming) I believe that they are very important.

13 Q If we have a situation where it's been predetermined
14 that the evacuation is going to be the protective action
15 strategy, does an ETE serve any purpose?

16 MR. REIS: Mr. Chairman, I object to the question,
17 and that the word was "predetermined" that the evacuation
18 strategy would be used; and I don't think that's in the record.

19 MR. BACKUS: I think it is.

20 THE WITNESS: (Cumming) Mr. Keller says not in that
21 situation. I would disagree. I think that in the accident
22 progression there might be, you know, not knowing exactly what
23 the accident progression will be that may make it of limited
24 usefulness. But I still think it would be of some importance.

25

1 BY MR. BACKUS:

2 Q How?

3 A (Keller) I thought --

4 MR. DIGNAN: Mr. Backus, before you pursue the line,
5 could we have in the hypothetical, are you assuming that the
6 accident is one where the evacuation order is dictated to be
7 for the entire EPZ? I mean, you haven't put a parameter of
8 what the accident is in here.

9 MR. BACKUS: My understanding --

10 MR. DIGNAN: And I can't believe you intend to cover
11 all accidents with this.

12 MR. BACKUS: No, I don't.

13 MR. DIGNAN: All right.

14 MR. BACKUS: My understanding is --

15 MR. DIGNAN: Can we have an accident parameter.

16 MR. BACKUS: My understanding is, and I'm sure
17 somebody can correct me if I'm wrong, but my understanding of
18 the State's testimony was that if they were going to evacuate
19 the beach areas there would not be inconsistent directions,
20 that the order would be to evacuate everybody within, I think
21 it was the two mile, maybe the three-mile ring. But that's
22 definitively what's going to happen.

23 My further understanding is that there are just,
24 according to the State and the FEMA witnesses that have
25 evaluated the State, there were very few instances in which

1 evacuation would not be ordered in the event of protective
2 action offsite was needed.

3 Given that, and assuming that we're not in one of
4 those rare situations where the road obstructions was one of
5 them, I'm asking what purpose does an ETE serve.

6 BY MR. BACKUS:

7 Q And I'll ask Mr. Keller, if he did express the
8 opinion that Mr. Cumming said that in that situation it doesn't
9 serve a purpose?

10 A (Keller) For that small segment of the population
11 that you're talking about, and for that specific instance that
12 you're talking about, it doesn't serve a great purpose.

13 Q All right. Mr. Cumming, you're familiar with FEMA's
14 guidance memorandum I presume that had been served on the
15 parties?

16 A (Cumming) Yes, I am.

17 Q Are you familiar with guidance memorandum 21 on
18 technological hazards except in criteria for evacuation plans
19 dated February 29th, 1984?

20 A (Cumming) I think so.

21 Q Have you got that in front of you?

22 A (Cumming) Well, I'm looking at a chart which shows
23 what existing guidance is and it says that that will be
24 superseded by -- GM-21 will be retitled GM-EV-1, and I think
25 EV-1 is out. But unfortunately, I don't have a distinct memory

1 of what EV-1 says. So if you want to work over superseded
2 guidance, I'll --

3 Q Well, we were served these by Attorney Flynn quite
4 recently, I believe, and this was in the package.

5 A (Keller) May I ask what the date on the cover is?

6 Q Unfortunately, the more recent one Attorney Flynn
7 served me I left in my car. I'm working with one that bears
8 the date of April 21, 1987.

9 A (Keller) No, that's not the last one. There are
10 later packages than that, I am sure.

11 Q Well, have you got anything there labeled "Guidance
12 memorandum 21," and subject to finding out whether it has been
13 withdraw or something, I've got a question I want to ask about
14 it.

15 A (Keller) We have 21.

16 Q Look at page one under "background" in the fourth
17 paragraph which states, does it not: "It is also important to
18 note the time period necessary to effect a partial or complete
19 evacuation, faced with a decision whether to shelter or
20 evacuate authorities must compare the time period predicted for
21 release of gaseous and particulate material with the time
22 needed for evacuation. Unless evacuation can proceed the
23 release, the public may be exposed to higher doses of radiation
24 in their cars than they would have been in basements or other
25 shelters;" correct?

1 A (Cumming) I think that's why I made my statement and
2 disagreed with Mr. Keller.

3 Q Okay.

4 A (Cumming) I think I intuitively remembered that some
5 place.

6 Q That does not suggest --

7 A (Cumming) The point is that the -- the accident
8 progression is typically unknown. The likelihood nature and
9 duration of the release is something that is uncertain. It
10 doesn't mean that the decisionmaker is not forced to make a
11 best judgment, and you want to put as much information as you
12 can in the hand of that decisionmaker. That's why I support
13 the importance of ETEs.

14 Q Doesn't that suggest, Mr. Cumming, that you need to
15 know an evacuation time estimate, among other things, in order
16 to know whether you can move people before they're going to be
17 affected by a radioactive plume or particulates?

18 A (Cumming) The whole thrust of our testimony is that
19 evacuation may be a very important protective measure.

20 Q And you don't dispute that given the evacuation time
21 estimates at Seabrook that it indeed may not be able to carry
22 out the evacuation before the entire time of plume passage?

23 MR. DIGNAN: In what accident series?

24 MR. BACKUS: Serious fast-breaking accident.

25 THE WITNESS: (Keller) I will agree in some

1 accidents your statement is a true statement.

2 MR. BACKUS: All right. Thank you. Thank you,
3 gentlemen.

4 And thank you, members of the Board for putting up
5 with me until 12:30.

6 JUDGE SMITH: We'll take an hour, return at 1:30.

7 (Whereupon, at 12:28 p.m. the hearing was recessed to
8 reconvene at 1:30 p.m., this same day, Thursday, June 16, 1988,
9 at the same place.)

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(Mr. Backus's cross-examination
plan on Joseph Keller and
William Cumming follows:)

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CROSS-EXAMINATION PLAN FOR FEMA PANEL (CUMMING)

The purpose of the cross-examination will be to explore the witnesses' qualifications, the factors relied upon for his belief that the agency should change its position, the reasonableness of those factors, and the standards used for arriving at a determination that reasonable assurance is provided by the current New Hampshire plans.

1. Qualification of the witness, in regard to his claimed response of the technical part of the testimony.

2. The June 10th testimony. Are there significant changes in the testimony as filed on March 14th, and by whom was the new testimony authorized?

3. The relationship of the new testimony to the interim testimony of July 25th. Is the January 25th testimony, sponsored by this witness, stating that reasonable assurance is a separate matter from compliance with NUREG 0654 consistent with his position then or in the new testimony?

4. In his listing of chronology of significant events, why did the testimony leave out certain events, including the publication of REP 3, the June 2nd and June 4th meetings in Washington, the January 19th meeting with the NRC, the so-called "would-could" meeting of January 22 or 25, and the Pilgraim negative finding.

5. Does the witness recognize, as set forth in REP 3, that Seabrook is indeed a special case.

6. Which factor was crucial in changing the witness' view that the prior agency position was legally based? Was it not the board's decision of November 16th on Sholley-Beyer.

7. The subsequent things listed in the June 10th testimony, ALAB 838 and the Shoreham decision of May 10th. How can these be related to the agency's change of position. Do they establish, as the testimony claims, that decontamination or access control are part of the range of protective action.

8. Doesn't the witness have the opinion that NRC determination of what constitutes reasonable assurance are binding on FEMA. Doesn't he agree that those determinations indicate that as long as a plan achieves some dose savings a reasonable assurance finding must be made, if the NUREG elements have been met.

9. Does he acknowledge that at Seabrook there are, in the words of Attorney Joseph Flynn before this board, "lousy ETE's and lousy sheltering", and does he believe this is legally irrelevant?

10. Isn't it in fact true that the NH plan still calls for sheltering all of the beach population in certain circumstances and that there is no sheltering plan for this? In light of this, does the witness still claim that reasonable assurance is provided by the New Hampshire plans?

11. Does the witness agree that Mr. Thomas was a dedicated civil servant and a highly credible person?

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1 A F T E R N O O N S E S S I O N

2 (1:31 p.m.)

3 Whereupon,

4 JOSEPH KELLER

5 WILLIAM CUMMING

6 having been previously duly sworn, resumed the witness stand
7 and was examined and testified further as follows:

8 JUDGE SMITH: Are you ready? Who is going to
9 proceed?

10 MR. BROCK: I am, Your Honor.

11 CROSS-EXAMINATION

12 BY MR. BROCK:

13 Q Mr. Cumming, I think we're starting. I'd like to
14 follow up on a couple lines raised by Mr. Backus. The first
15 one, as I understood, you agreed with him that the regulations
16 contained in 44 CFR 350.5 are mandatory; is that a fair
17 characterization?

18 A (Cumming) Well, as Mr. Flynn pointed out the
19 regulations speak for themselves. There is certainly language
20 in there that appear to indicate that they're mandatory. The
21 problem is that they are, in a way, misleading because
22 participation in radiological emergency preparedness is a
23 voluntary program with respect to state and local governments.
24 It's a voluntary act by a governor to submit plans. It's not,
25 there's no regulatory authority vested in the Federal Emergency

1 Management Agency.

2 Q Are you through.

3 You would agree that once a state submits plans to
4 FEMA, though, under 350.5 in order to get FEMA approval the
5 regs as presently promulgated, that the plans must meet the
6 standards outline in there; isn't that correct?

7 A (Cumming) Yes. My point is simply that there's no
8 commerce clause authority vested in FEMA; it's a voluntary
9 program. The authority is vested in the Nuclear Regulatory
10 Commission.

11 Q So when you said earlier or agreed with Mr. Backus
12 earlier that the 350.5 is not properly authorized, did I
13 understand that to me that in your opinion FEMA does not have
14 legal authority to promulgate mandatory regulations or to set
15 mandatory standards for nuclear powerplants?

16 A (Cumming) That's correct. But my discussions with
17 Mr. Backus, he didn't follow up. My interpretation of 350.5 is
18 perhaps slightly different than other people. I think that the
19 majority of the view in FEMA at this point is, that the
20 application of the review criteria is how judgment is asserted.

21 I think that a misimpression existed in the minds of
22 certain people because it was a separate subparagraph, it was
23 (b) and it reads: "In order for state," misprint of, it should
24 be "or local plans in preparedness to be approved such plans
25 and preparedness must be determined to adequately protect the

1 public health and safety by providing a reasonable assurance
2 that appropriate protective measures can be taken."

3 Now, I haven't finished the statement. A lot of
4 people, I don't think, read further, "Offsite in the event of a
5 radiological emergency." The reason I think that's important
6 and it goes to the vesting of some responsibilities by the
7 Carter Administration in FEMA is, that there is some expertise
8 in emergency preparedness.

9 And to grossly oversimplify and just to use an
10 example, a bus driver who is involved in evacuation may have a
11 dosimeter, and he may be charged under the plan with reading
12 that dosimeter. But if he reads the dosimeter to the effect of
13 driving the bus into a tree, he has affected the health and
14 safety of his passengers.

15 It's clear, however, that where emergency management
16 judgments are made, and they could be made like, for example,
17 in a sheltering situation it could be that a long term
18 sheltering situation you had other typical emergency management
19 aspects to it, that there might be emergency management
20 concerns. Basically, medical care, food, sewage and water.

21 But it's clear that 350.5 talks about in terms of
22 radiological preparedness. And radiological preparedness, the
23 expertise, the two expertise is vested in the Nuclear
24 Regulatory Commission.

25 Q Would you agree that on the face of 350.5 as

1 presently promulgated, it requires FEMA to conduct a, what's
2 been referred to, a two-tier review; the first, as you've
3 indicated in part A, the 16 standards referencing the NUREG,
4 and separate and independent from that part B, the reasonable
5 assurance standard?

6 A (Cumming) I don't believe anyone in FEMA today
7 accepts a two-tier standard. I will willingly admit that in
8 the summer of 1987 many people believed that there was a two-
9 tier standard.

10 Q Have you communicated to FEMA officials in Washington
11 your view that the mandatory regulations in 350.5 are illegal?

12 A (Cumming) No, because I haven't been in a position
13 that I would communicate that, other than to say I have
14 repeatedly on occasions prior to today expressed the view to
15 them that they think that they are -- because of the use of the
16 word "shall" in those regulations, that they in fact mandate
17 the state or local government must submit plans or must comply
18 with those requirements, irrespective of the issue of approval.
19 That they are not regulating state and local government or any
20 other submitter of plans.

21 Q Well, as I understood your prior testimony you said
22 that the regulations in 350.5 or at least some of those could
23 be read as mandating certain planning standards, and to the
24 extent they did, in your view, FEMA has no authority to do
25 that. And my question is to you, have you advised FEMA

1 officials in Washington or discussed the matter that in your
2 opinion those regulations are outside the scope of FEMA's
3 authority?

4 A (Cumming) Yes. I have told them that if that is
5 their interpretation they're wrong. I can make an argument, I
6 looked at the regs over lunch. That you can make the argument
7 that that's not what the regs say, that they do clearly
8 indicate it's a voluntary submission. Once you've passed that
9 threshold, then you get approval; it's mandatory in that sense.

10 But without getting over that threshold voluntary
11 submission you never reach the ultimate point. In other words,
12 you cannot argue, in my judgment, that those regs somehow
13 mandate state and local participation.

14 Q I'm going to move to another line, if I could.
15 Do you have yesterday's transcript, Mr. Cumming?

16 A (Cumming) No.

17 MR. BROCK: Is there a copy you have, Joe, you could
18 provide him.

19 I'm looking at page 13733, this is part of the Thomas
20 direct testimony. And I'm going to read a portion of it,
21 anybody for context, if they feel it needs to be expanded upon
22 please comment it.

23 But as I understand Mr. Thomas's answer which begins
24 at about the middle of that page, 17 -- excuse me, 13733. He's
25 describing what Mr. McLoughlin outlined to him in a meeting of

1 January 5, 1988 regarding the proper standard for reviewing
2 emergency plans.

3 And a portion of his answer reads, this is Mr.
4 McLoughlin's view being expressed to Mr. Thomas: "We ignore
5 any recommendation along the lines that FEMA had once made in
6 REP-3 for consideration of additional road construction or ramp
7 construction. We just focus on doing the best emergency plans
8 that can be, considering the nature of the site."

9 BY MR. BROCK:

10 Q My question to you, Mr. Cumming, is, in your opinion,
11 is that FEMA's present position with respect to the standard
12 for reviewing emergency plans?

13 A (Cumming) First of all, I was not in that January
14 5th meeting.

15 Q I understand that.

16 A (Cumming) I found out for the first time when I read
17 Ms. Hock's deposition that there was such a meeting.

18 There have been discussions in at least one other
19 plant site, but they were not initiated by FEMA, at Indian
20 Point, as to whether there needed to be improvement in the
21 ramps, and the turnoffs.

22 Q Well, can you answer --

23 A (Cumming) REP-3 was promulgated in a time in which
24 FEMA had no final regulations. And there's no question in my
25 mind that there may have been misunderstanding because of the

1 way that NRC and FEMA originally agreed as to where this
2 emergency planning was going. There's no question that the
3 impact of various Board orders, rulings, Commission decisions
4 have affected the trend of emergency planning.

5 Q I understand that's your view, Mr. Cumming. What I'm
6 asking is, is the quotation which I read, does that
7 characterize FEMA's present position with respect to emergency
8 planning as you understand it?

9 A (Cumming) I would say, yes.

10 Q Now, based on your prior discussions, as I understood
11 them, that to the extent NRC takes a position on these
12 emergency planning issues FEMA is bound by that, now that is
13 generally your testimony; is that correct?

14 MR. FLYNN: Objection, it mischaracterizes what he
15 said. It's not just the taking of a position. The deference
16 that is given to NRC is on matters of interpretation of NRC
17 regulations; and that's what the witness has said.

18 BY MR. BROCK:

19 Q Mr. Cumming, would you agree that the quotation which
20 I read, to the extent that you understand it, does that also
21 reflect NRC's present view with respect to emergency planning?

22 MR. FLYNN: Objection.

23 THE WITNESS: (Cumming) Well, I'm not an expert on
24 NRC's view. But I would say, yes. I would also state, so that
25 there's no misunderstanding, that it's also true that

1 frequently in review of plant sites, bantered around is the
2 discussion of the fact that, hey, if they're going to spend all
3 this money on a plant, they could significantly do such and
4 such, left blank, for a nominal amount of money and improve
5 safety.

6 But everyone understands that that's not a call of
7 FEMA.

8 BY MR. BROCK:

9 Q Is that view which you understand NRC presently
10 holds, has NRC, to your knowledge, always held that view with
11 respect to emergency planning?

12 A (Cumming) I would say it's much clearer after the
13 San Onofre decision. And I'll tell you the reason for it.

14 Q Could you give me a date on that decision?

15 A (Cumming) It's '83, I think.

16 Q All right.

17 A (Cumming) Two Commissioners, in fact in the context
18 of Seabrook, Gilinsky and Bradford I believe, in an order or
19 directive or whatever to send it and argue that there should be
20 some physical improvement to egress and access for the purposes
21 of minimizing the ETE back as early as 1981; and was filed with
22 Bob Backus's brief to the First Circuit.

23 Q You're familiar with the Christenbury memo, I believe
24 you cited it in your testimony; is that correct?

25 A (Cumming) Yes, I am.

1 Q Do you have a copy of that?

2 A (Cumming) Yes, I do.

3 Q I'm looking at page three of that memo, if you could
4 get that. Do you have that?

5 A (Cumming) Yes.

6 Q And again, for context let me just read a portion of
7 it, quoting: "These statements demonstrate that the goal of
8 emergency planning is to reduce the impact and achieve dose
9 savings in a spectrum of accidents," and it goes on. It says:
10 "Notwithstanding our opinion that Mr. Dignan is essentially
11 correct in his conclusion as to item A, two statements
12 contained in this portion of his memorandum required
13 clarification."

14 And the last paragraph on that page says: "Secondly,
15 his memorandum states that emergency planning is intended to
16 limit any adverse health effects to as low a level of
17 reasonably possible, quote, "given the facilities at hand,"
18 unquote, possibly implying that additional facilities will
19 never be required to be built or installed to satisfy NRC
20 emergency planning regulations."

21 Continuing the quote: "In support of this statement
22 Mr. Dignan cites the San Onofre decision," I believe that is
23 the one that you just referred to.

24 A (Cumming) Yes, it is.

25 Q "However, that decision provides only limited support

1 for this conclusion. There the Commission addressed only the
2 issue of whether additional hospital construction should be
3 undertaken, and concluded that such extraordinary measures are
4 not required."

5 Now, isn't it a fair characterization of that comment
6 that, at least in the view of Mr. Christenbury at that time, he
7 was not ruling out that additional construction, perhaps
8 substantial construction would be required in order to meet
9 emergency planning standards?

10 MR. FLYNN: Objection. I object to the question and
11 I object to the line of questioning. The -- Mr. Brock is
12 examining Mr. Cumming on Mr. Christenbury's views; it's
13 irrelevant. The relevance of the line of questioning is to
14 establish the standard that FEMA has applied.

15 The witness has stated the standard. Apparently, Mr.
16 Brock is trying to argue him out of that statement.

17 MR. BROCK: Your Honor, the memo is cited in the
18 testimony that's being offered by this witness as a legal
19 consideration -- as one of the legal considerations which was
20 an important influence on FEMA.

21 The San Onofre decision, this witness cited himself.
22 I'm simply referring to the Christenbury memo in more detail
23 for the proposition that what this witness says it says is
24 inaccurate.

25 MR. FLYNN: The pending question is, does the quote

1 reflect Mr. Christenbury's views? And I submit that's
2 irrelevant.

3 MR. BROCK: The views of the agency, Your Honor. It
4 would be the views of the NRC as expressed in this memo as this
5 witness understands them, has testified to them, and has cited
6 the case which Mr. Christenbury also cites.

7 The point being, Your Honor, this witness has given a
8 view of the present FEMA position with respect to emergency
9 planning and whether additional facilities or construction may
10 be required.

11 I think the reference impeaches that view. I'm
12 simply asking the witness, based on this comment, if he wishes
13 to restate his position or retract his prior statement.

14 JUDGE SMITH: I've missed the logic of it. One of
15 the things that troubled me is, the San Onofre case with which
16 I'm familiar, the one that you alluded to in the Christenbury
17 memo did in fact refer to facilities for the treatment of
18 contaminated injured individuals.

19 I thought you alluded to yet another San Onofre case
20 that I had never heard of, that had something to do with egress
21 and egress -- I mean, ingress and egress to roadways.

22 So I got sort of off the thread of logic right there.
23 And while I was thinking about that, I didn't follow the nexus
24 between your question to him and Mr. Christenbury's use of San
25 Onofre. I'm in a fog here.

1 MR. BROCK: Let me make one more effort here, Your
2 Honor, I'll withdraw the question.

3 BY MR. BROCK:

4 Q As I understood your testimony, Mr. Cumming, you
5 stated it was FEMA's present view and NRC's present view, as
6 you understood it, with respect to emergency planning that you
7 accept the site as it is; isn't that correct?

8 A (Cumming) Yes. And the San Onofre decision, whether
9 or not I agree with Ed Christenbury's -- that's not the portion
10 of this opinion for which I draw legal support for the FEMA
11 position as filed and to which I'm testifying today.

12 What I would also buttress this is say, in the NUREG
13 itself it says the following -- sorry, not the NUREG, the 0396,
14 the predecessor document states at page 15: "No special
15 radiological medical provisions for the general public. No new
16 construction of special public facilities for emergency use.
17 No special stockpiles of emergency animal feed. No special
18 decontamination equipment for property and equipment. No
19 participation by the general public of test exercises of
20 emergency plans."

21 Now, there's something important for you to
22 understand. NUREG-0396 FEMA never was involved with; that was
23 EPA/NRC. But it is certainly a document that is substantively
24 incorporated, and the premises of which NUREG-0654 adopts, in
25 my judgment.

1 MR. BROCK: Could I have just one minute, Your Honor.

2 (Pause)

3 (Continued on next page.)

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1 MR. BROCK: That's all I have, Your Honor.

2 MS. WEISS: I'm not exactly sure how to proceed, Your
3 Honor. I seek the Court's guidance.

4 Ms. Sneider and I have divided up the main
5 responsibility for the questioning on Mr. Keller. I do have a
6 few follow-up questions on Mr. Cumming, though. And I wonder
7 if we want to all finish with Mr. Cumming or -- and then go to
8 Mr. Keller?

9 JUDGE SMITH: Well, we give deference to you. But
10 everything being equal, I think for better continuity if you
11 finished Mr. Cumming, that would be better.

12 MS. WEISS: Okay, I'll just do that.

13 CROSS-EXAMINATION

14 BY MS. WEISS:

15 Q Would it be accurate to say, Mr. Cumming, that the
16 focus of FEMA's various pieces of testimony up through that
17 filed on March 14th were based on FEMA's interpretation of its
18 own rules?

19 A (Cumming) Absolutely.

20 Q And that the March 14th and the January 10th
21 testimony is based on FEMA's interpretation of NRC's rules?

22 A (Cumming) June 10th.

23 It still is an interpretation of our rules and our
24 administrative process. But it relies heavily, if not
25 definitively, on a construction of our understanding of NRC's

1 own positions.

2 Q It's your position now, I think you testified, that
3 there is one definitive set of interpretations of emergency
4 planning and that the source of those is the NRC, correct?

5 A (Cumming) I pointed out at the start of my
6 testimony, or cross-examination, that there is a bridge between
7 both regulatory schemes dealing with the standards
8 10 CFR 50.47(b) (1-16) and 44 CFR 350.5(a) (1-16).

9 So it is understandable that given normal agency
10 practice that some people would understand that FEMA had an
11 obligation to interpret the standards which are incorporated in
12 its regulations.

13 I'm not saying that we don't have that obligation.
14 What I am saying is, however, the definitive interpretation of
15 what that scheme means as far as the overall regulatory scheme
16 for radiological emergency preparedness has been left in the
17 hands of the Nuclear Regulatory Commission and its adjudicatory
18 bodies, and ultimately the federal courts.

19 Q But as to the --

20 A (Cumming) We don't have the last word.

21 Q Both as to the overall requirements and all the
22 particular elements thereof; isn't that your opinion?

23 A (Cumming) Well, if I could analogize, I would think
24 that there are cases where de novo issues come up, and they may
25 burgeon up or boil up on the FEMA side in the RACs. That's one

1 of the reasons the NRC is a member of the RACs. And it seems
2 to me that ultimately many of those get resolved amicably.

3 But in the case if you actually had a difference of
4 opinion, ultimately there has to be a final say, and the final
5 say is with the Nuclear Regulatory Commission and its
6 adjudicatory bodies.

7 Q As to all of elements of --

8 A (Cumming) As to whether the plan --

9 Q As to all of the elements of what's required to
10 determine whether emergency preparedness is adequate; isn't
11 that correct?

12 A (Cumming) As to whether those bridge planning
13 standards have been met.

14 Q And didn't you also testify at your deposition that
15 NRC has absolute authority to change any of those 16 planning
16 standards which were jointly adopted in 0654 and appear jointly
17 in both agencies' rules without consulting FEMA, much less
18 getting its concurrence?

19 A (Cumming) Yes, I did.

20 Q And isn't --

21 A (Cumming) We haven't had that situation yet in the
22 sense of formal amendment of the rule without our input. There
23 is no question that there have been cases where there have been
24 Commission or adjudicatory decisions where our input has been
25 extremely limited.

1 Q That's the logical conclusion of your interpretation
2 of the relationship between FEMA --

3 A (Cumming) That's correct.

4 Q -- and the NRC.

5 MR. FLYNN: I would instruct the witness to allow the
6 examiner to finish the question before --

7 MS. WEISS: (Cumming) We're doing fine, Mr. Flynn.

8 MR. FLYNN: -- starting to answer.

9 MS. WEISS: We're doing fine.

10 BY MS. WEISS:

11 Q And if the NRC were to adopt a position inconsistent
12 with yours with respect to what the criteria should be, or
13 whether the criteria are met, it's your view that FEMA must
14 yield to the NRC's definitive interpretation; correct?

15 A (Cumming) Well, I suppose we could march on on our
16 own without any legal impact of those decisions.

17 Q You are legally bound.

18 A (Cumming) But we are certainly --

19 Q It's your legal opinion.

20 A (Cumming) Legally we have no basis upon which we
21 could challenge. We have no standing. We are in a
22 relationship with NRC under the MOU which, in my judgment,
23 accurately reflects the Atomic Energy Act.

24 Q Well, the MOU refers to FEMA as having lead
25 responsibility for establishing the criteria, doesn't it?

1 Is that one of the parts you think is wrong?

2 A (Cumming) That I disagree with.

3 Q In other words, you think the MOU is wrong?

4 A (Cumming) I think if -- I think if you are
5 interpreting the MOU to say that FEMA had the lead
6 responsibility for developing these bridge planning standards,
7 I would absolutely disagree. I think they were clearly joint,
8 or to some extent in this case, EPA was the predecessor
9 organization to FEMA that was involved with the planning
10 standards, not FEMA.

11 Q So the MOU should --

12 A (Cumming) But we've adopted them.

13 Q The MOU should not be interpreted as giving FEMA lead
14 responsibility for establishing the criteria for emergency
15 preparedness; is that your opinion?

16 A (Cumming) If you are saying by "lead" sole or --

17 Q No, no. I would interpret lead as at least requiring
18 a concurrence before changing a standard.

19 A (Cumming) I would say that "lead" means in this case
20 to surface issues perhaps, but it's a joint responsibility as
21 to how the standards are ultimately adopted and promulgated or
22 required.

23 Q Well, you just testified to me that NRC can change
24 any of those rules without consulting you, much less gaining
25 your concurrence. So how is that joint responsibility?

1 MR. DIGNAN: Could I object to the relevance of this
2 line?

3 What difference does -- first of all, what difference
4 to this case does it make what he thinks on the subject. And
5 what difference does it make to this case whether he's right or
6 wrong on that subject, as to whether NRC can or cannot change
7 these standards.

8 The standards are there. The Board's going to judge
9 the plan against those standards. And what is the -- until
10 they change in mid course, what's the relevance of this
11 inquiry?

12 MS. WEISS: Well, it might not surprise you to learn
13 that I'm going to argue that FEMA's current interpretation of
14 its relationship to the NRC is absurd on its face and
15 inconsistent with prevailing law, and I hope that I can
16 establish that.

17 MR. DIGNAN: Well, that's fine. Argue it. The
18 brief's the proper place, and hopefully you won't use the word
19 "absurd" about a federal agency, but you might.

20 MS. WEISS: Oh, I think I might.

21 MR. DIGNAN: And you argue it. But what do you ask
22 him for? He's not the judge.

23 MS. WEISS: Because he's the person who is going to
24 tell me what the logical extension is of his opinion. And I
25 submit it is far from apparent on the face of his testimony.

1 JUDGE SMITH: I thought I understood the relevance
2 of your questioning before, but since you explained it, now I
3 don't.

4 MS. WEISS: Well, that's a bad sign.

5 MR. DIGNAN: Definitely go in the brief now.

6 JUDGE SMITH: Want to give it another shot, or have
7 you -- has she satisfied you?

8 MR. DIGNAN: No, I'm pressing the objection. I
9 see -- I enjoy listening to Mr. Cumming's legal philosophy
10 course here, and I think it's good philosophy. I think it's
11 right. But I'm not sure that it's relevant to the case.

12 MS. WEISS: The witness has been brought here to
13 explicate FEMA's legal position. That's the underpinning of
14 FEMA's current position is that their decisionmaking is totally
15 driven --

16 MR. DIGNAN: Well, but --

17 MS. WEISS: Wait a minute. Let me finish.

18 By their legal interpretation of their authority and
19 the requirement that they defer to NRC, and I'm just exploring
20 it.

21 MR. DIGNAN: I concur, and he's explicated that. But
22 that's not what you're asking him now. You're asking him
23 should in the future NRC on its own change one of the planning
24 standards, would you be bound. And that might be a very
25 interesting question when, as, and if tomorrow they change it,

1 and that becomes an issue in this case.

2 But the last time I looked those 16 standards, bless
3 their little hearts, are sitting out there and my client has to
4 satisfy them.

5 MS. WEISS: Well, I think that --

6 MR. DIGNAN: And what difference does it make,
7 assuming they changed it, whether or not his agency would feel
8 bound by the change?

9 MS. WEISS: It goes to the reasonableness of his
10 current -- agency's current legal position.

11 MR. DIGNAN: The agency hasn't been required to take
12 a position on that that will affect this case.

13 MS. WEISS: It's a logical extension of his position
14 in Seabrook.

15 MR. DIGNAN: I object. I can't say my objection
16 is --

17 JUDGE SMITH: It's marginally relevant. You know,
18 you're testing his -- how submissive do you believe his agency
19 is to NRC, and this was a theoretical hypothetical test. It's
20 not -- Mr. Dignan says that it hasn't happened, and it doesn't
21 mean much.

22 But isn't your basic point -- your basic argument is
23 that FEMA surrendered its independent and it was exercising its
24 independence in its original position, and it has improperly
25 deferred to the NRC. Therefore, its present position should be

1 disregarded and, voila, --

2 MS. WEISS: Beyond that.

3 JUDGE SMITH: -- the original position is --

4 MS. WEISS: Beyond that.

5 JUDGE SMITH: -- back --

6 MS. WEISS: Beyond that. That its current position
7 is inconsistent with prevailing law and the agency's
8 obligations. That it's irrational.

9 JUDGE SMITH: The prevailing law of what agency?

10 MS. WEISS: Of FEMA.

11 MR. DIGNAN: Well, we're the NRC.

12 MS. WEISS: And the NRC. For the MOU --

13 MR. DIGNAN: We're the NRC.

14 MS. WEISS: -- and the presidential order.

15 MR. DIGNAN: We don't care what FEMA thinks. Those
16 guys give us the ticket; not FEMA.

17 JUDGE SMITH: Well --

18 MS. WEISS: Well, what's his testimony all about?
19 You need FEMA's testimony in order to get your plant licensed.

20 MR. DIGNAN: I don't know about that.

21 MS. WEISS: Well.

22 MR. DIGNAN: I was going without it before we
23 started. You had FEMA's testimony before we started.

24 MS. WEISS: FEMA has to appear here.

25 MR. DIGNAN: And I didn't quit.

1 MS. WEISS: FEMA has to appear here. You need it in
2 that sense. Rules require it.

3 MR. DIGNAN: Well, I thought --

4 JUDGE SMITH: I think this --

5 MR. DIGNAN: They've appeared.

6 Now can I have my licensed?

7 (Laughter.)

8 MS. WEISS: That's necessary but not sufficient.

9 I think the question was asked and answered, wasn't
10 it?

11 MR. DIGNAN: Well, if it's asked and answered, then
12 we can move on?

13 MS. WEISS: I think it was.

14 MR. DIGNAN: Great. I guess there's no question
15 pending.

16 JUDGE SMITH: All right. Do you have another
17 question?

18 MS. WEISS: I think it was asked and answered.

19 BY MS. WEISS:

20 Q Let's go on to another subject.

21 You mentioned that you had argued strenuously when
22 the March 14th testimony was being prepared in Washington, that
23 it should not at all refer to the January 25th FEMA
24 supplemental testimony, but you were overruled; is that
25 correct?

1 A (Cumming) That's correct.

2 Q Who overruled you?

3 A (Cumming) Well, I guess Joe Flynn, with the
4 concurrence of his superiors and program officials.

5 I don't know that. I honestly don't know that. I
6 know Joe Flynn told me that that it was going to be filed as
7 part of the testimony.

8 Q Well, would we be -- it would be fair for us to
9 conclude that that decision was approved by program officials
10 within FEMA?

11 A (Cumming) Absolutely.

12 Q But I think Grant Peterson had the final call on that
13 testimony?

14 A (Cumming) He certainly had the final call, and I'm
15 certain, in my own mind reasonably certain that he did approve
16 it. I --

17 Q And do you know -- I'm sorry.

18 A (Cumming) -- can't close that final inch gap. I
19 didn't see him sign off on a document. I've never seen a
20 signed off document.

21 Q And we don't know if Mr. Peterson approved the
22 excision of all reference to the January 25th testimony, do we?

23 A (Cumming) Same thing stands. I would make the same
24 argument.

25 I'm assuming Mr. Flynn went through the appropriate

1 approval process. I think that's a very safe assumption.

2 Q There was some discussion of the consistency between
3 the Pilgrim and the Seabrook cases and FEMA's role in both of
4 those. And you testified at your deposition and here earlier
5 this morning that you saw an inconsistency between the agency's
6 current position on Seabrook and its position this summer on
7 Pilgrim; is that accurate, with respect to the beach
8 population?

9 A (Cumming) Yes.

10 Q And you also testified that there was a meeting with
11 NRC on April 11th, and you found out that the NRC still had
12 substantial concerns about the beach population issues at
13 Pilgrim.

14 Is that also correct?

15 A (Cumming) They didn't specify the beach population
16 specifically in the meeting, but they indicated that I was
17 absolutely incorrect in my deposition to say that they had
18 ignored FEMA's finding, and that they did have legitimate
19 concerns that -- I need a word and I can't find it -- that they
20 were at least sympathetic to FEMA's concerns that we had
21 expressed in the transmittal of the finding, and they had not
22 just unilaterally tossed out the piece of paper we sent over.

23 I think NRC knows when we send a piece of paper over
24 that its a negative finding, that there is a legitimate concern
25 on behalf of the agency as to the issues raised by those

1 negative findings.

2 Q Is it still your view that the position that FEMA is
3 currently taking on Seabrook and the position it took on
4 Pilgrim this summer are mutually inconsistent?

5 A (Cumming) The beach population issue was one of six,
6 five or six specifically identified at Pilgrim. And I would
7 say to that extent there is an overlap.

8 I am not the program official. There has to be a
9 weighing as to the factors. In fact, one of the things that
10 goes to is that I found out -- one of the really significant
11 things I found in the January 19th meeting was that a single
12 inadequacy does not cause a no reasonable assurance finding.

13 The plans I have signed off on legally had all As,
14 and while some of the negative findings had Is, I ain't never
15 signed off on a plan that didn't have all As. But I understand
16 from some people --

17 Q There are others who have.

18 A (Cumming) -- that there are others.

19 Now I can understand the rationale for that, because
20 you have a number of planning elements. And yet you could
21 argue that you could have an inadequate element, and yet the
22 overall planning standard is made. And that might be a
23 situation in which the true judgment of the emergency planner
24 would have to apply. And I think that's what Mr. McLoughlin
25 was trying to indicate in his testimony, to the extent I

1 remember.

2 (Continued on next page.)

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1 Q Okay. Just with respect to the beach population
2 issues. Is it still your opinion today that the position the
3 agency is taking with respect to Seabrook with respect to the
4 beach population issues, your agency, is inconsistent with the
5 position it took this summer on Pilgrim?

6 A (Cumming) That's my position, yes.

7 Q And you don't know whether NRC sees that
8 inconsistency or not.

9 A (Cumming) I don't know.

10 Q In any case, they seem content to let the two lie?

11 MR. FLYNN: Objection. Beyond the competence of the
12 witness.

13 MS. WEISS: Withdrawn.

14 BY MS. WEISS:

15 Q And you are the senior official of the Office of
16 General Counsel that signed off on the Pilgrim self-
17 initiated --

18 A (Cumming) Yes.

19 MR. OLESKEY: Just for the record, Your Honor, I
20 think the FEMA finding of last summer; not this summer.

21 THE WITNESS: (Cumming) August '87.

22 MR. OLESKEY: Right.

23 MS. WEISS: Thank you.

24 BY MS. WEISS:

25 Q With regard to your testimony about it being required

1 that if a RAC chairman choose to overrule the RAC he must
2 document his decision and rebut on the record the arguments on
3 the majority of the RAC, isn't it true that Mr. Thomas tried to
4 do this?

5 He specifically requested that he be provided
6 resources to prepare that rebuttal, and that FEMA refused?

7 A (Cumming) Well, I was intimately involved with this
8 issue from June '87 on. And I have to state on the record that
9 I could never obtain a clear understanding what had occurred in
10 those RAC meetings, or what the position of the individual RAC
11 members were until the first significant trustworthy, probative
12 evidence, in my judgment, was the joint deposition of Thomas
13 and Bores on January 12th and 13th.

14 Q Well, that was specifically about the January 7th RAC
15 meeting, right?

16 A (Cumming) The January 7th RAC meeting -- in the
17 January 7th RAC meeting, 8th RAC meeting, there was significant
18 discussions about what had occurred at the prior RAC meeting.

19 Q Let me follow you down that digression.

20 There were lots of FEMA personnel at those July 30th
21 and April 15th RAC meetings besides Mr. Thomas, weren't there?

22 A (Cumming) I don't know that.

23 Q But don't you know for a fact that it's typical for
24 Mr. Dolan to be there, Mr. Swiven to be there, in addition to
25 Mr. Thomas, and for Mr. Rospenda from Argonne National Labs to

1 be there?

2 A (Cumming) No, I don't know that. I know Mr.
3 Rospenda's name is listed, but I don't know definitively who
4 was in those meetings.

5 Q What kind of --

6 A (Cumming) As far as I'm concerned, the notes I have
7 seen of Bob Rospenda, I would characterize as unreliable and
8 not adequate description of the events of those RAC meetings.

9 Q Pardon me for interruption.

10 What kind of effort did you make to find out what
11 happened at those RAC meetings?

12 A (Cumming) A lot of effort.

13 Q Did you call Mr. Rospenda?

14 A (Cumming) Did I call Mr. Rospenda.

15 No, I think all my communications were to Attorney
16 Flynn

17 Q Did you -- all your commu -- back to the question
18 that I originally asked you. Isn't it true that Mr. Thomas
19 tried to get resources from FEMA headquarters to prepare a
20 detailed rebuttal to the majority RAC views, and that FEMA
21 refused to provide the resources?

22 A (Cumming) That's not true.

23 Q Tell me what's not true about it.

24 A (Cumming) It's true in the sense that once the
25 agency had adopted the position, Ed said, following my advice

1 in part, we need technical support for this position. We need
2 other support, any appropriate support we can get.

3 What happened was that when the headquarters program
4 officials eventually responded to that request, and
5 incidentally, I have testified in my deposition, or gave my
6 deposition, I personally took steps to try and find out whether
7 other people within the agency whose judgement I relied upon,
8 and outside the agency, whether I thought that our position was
9 defensible.

10 There was no one who would defend the position.

11 MS. WEISS: Your Honor, this is not responsive to my
12 question. Could we just stop it here? I'm not going to move
13 to strike it, but I want to get back to my question.

14 JUDGE SMITH: Well, the narrow question is, did Mr.
15 Thomas seek resources to rebut the --

16 MS. WEISS: Majority -- to make a technical rebuttal
17 to the views of the majority of the RAC, and was he not refused
18 those resources by FEMA headquarters.

19 MR. DIGNAN: Well, the problem is the witness
20 answered that question. Said that wasn't true.

21 JUDGE SMITH: I know but his explanation --

22 MR. DIGNAN: And then the next question essentially,
23 I'm not saying literally, essentially was why. And we all know
24 what happens when you ask why, Judge. You find out.

25 JUDGE SMITH: The thing is, is it he's not done with

1 his answer yet?

2 MR. DIGNAN: I gather he's not.

3 JUDGE SMITH: I don't know if --

4 MR. DIGNAN: I think he should be allowed to finish
5 his answer.

6 MS. WEISS: You started off --

7 JUDGE SMITH: Everyone's speculating on what his
8 state of mind is. Let's here it from Mr. Cumming.

9 BY MS. WEISS:

10 Q You did start off this second answer by telling me it
11 was true --

12 A (Cumming) Ed Thomas very clearly --

13 Q -- in a sense.

14 A (Cumming) -- asked for all the support he could
15 get --

16 Q Right.

17 A (Cumming) -- from day one for his position. There
18 should be no doubt in anybody's mind about that.

19 But as to whether he was denied technical assistance,
20 the answer is, in my judgment, no, he was not denied technical
21 assistance.

22 The question was finding someone who could
23 technically support his position. And the problem was no one
24 could be found, including those who had signed off technically
25 originally, because they had in the meantime changed their

1 minds.

2 Q Well, he was never given that option, was he?

3 A (Cumming) Given what option?

4 Q To go and retain the resources necessary to support
5 his position.

6 Wasn't he told no, no, no, by Mr. Wingo; you can't
7 have it? Weren't not going to take your view, and we're not
8 going to give you an opportunity to buttress it. We've decided
9 we disagree. Isn't that what happened?

10 A (Cumming) No.

11 Q Just for clarify of the record with respect to the
12 January 2nd meeting with the NRC. You were told, weren't you,
13 that Bores 1 was being withdrawn?

14 MR. FLYNN: Excuse me.

15 THE WITNESS: (Cumming) June 2nd.

16 BY MS. WEISS:

17 Q June 2nd, I'm sorry. What did I say?

18 A (Cumming) January.

19 Q Sorry.

20 A (Cumming) I never remember that statement being
21 made.

22 MR. FLYNN: Let her finish the question.

23 MS. WEISS: Well, that was the question.

24 BY MS. WEISS:

25 Q Were you told in substance that the NRC was no longer

1 relying on the statements with regard to special design
2 features at Seabrook contained in Bores 1?

3 A (Cumming) My memory of that meeting, to which I went
4 to on very short notice, is that the bulk of the talking was
5 done by FEMA employees; that basically NRC sat and listened.

6 Q So you just simply don't recall the NRC saying we're
7 withdrawing Bore 1 --

8 A (Cumming) I do not recall --

9 Q -- or words to that effect?

10 A (Cumming) -- that statement being made.

11 Q Okay. You don't have any doubt, do you, that as you
12 define a definitive statement from the NRC, CLI-86-13 was a
13 definitive statement from July of 1986, forward, a ruling of
14 the full Commission?

15 A (Cumming) At the time of the June 2nd meeting my
16 focus was on the Christenbury memo.

17 To be honest, since I've litigated Shoreham, my real
18 intimate knowledge with that decision deal not with the issues
19 that are applicable here, but the so-called realism decision.
20 And I don't think that in the meeting on June 2nd, the pre-
21 meeting to the NRC meeting, I focused on anything but the
22 Christenbury memo.

23 In fact, it's only over the course of time that I
24 realized that the Christenbury memo came just before the full
25 Commission adopted much of the rationale in CLI-86-13.

1 Q Well, my point was actually a more narrow one.

2 A (Cumming) So, so to defend Dave McLoughlin, I
3 probably didn't even bring until later on in the summer that as
4 part of my legal ammunition for why our position was legally
5 incorrect.

6 Q You didn't realize the significance of it until
7 later; is that correct?

8 A (Cumming) I've always known its significance. I
9 don't think I argued its significance to the program officials.

10 Q You understood its significance in the same way you
11 today understand its significance from the time it was issued,
12 July of '86, correct?

13 A (Cumming) Well, I was not directly involved in REP
14 litigation or matters until September 1, 1986. That order had
15 gone out over a month beforehand, and I had to go back and
16 recreate. So it wasn't something that came in while I was
17 actively working on REP.

18 But what I've always found significant is it gives at
19 the Commission level specific statement of two of the primary
20 assumptions that emergency planners at NRC and FEMA have
21 operated on since day one. No minimum dose savings, no minimum
22 ETES.

23 I don't find a Commission level expression of that
24 prior to that date. But it was always assumed by both NRC and
25 FEMA people as far as I can discern.

1 Q So that was nothing new then. It didn't conflict
2 with any prevailing views at FEMA. In fact, it was fully
3 consistent with how FEMA had always interpreted its rules,
4 correct?

5 Isn't that what you just testified?

6 A (Cumming) Let me state that September 1, 1986, when
7 I came back into REP, I did not find a large number of
8 significant interpretative legal memoranda concerning the REP
9 program, and certainly none that focused on that issue.

10 So as to whether the program officials had been told
11 legally this is what you're required to do, I don't know.

12 Q No. Well, that wasn't my question.

13 I mean, didn't you just testify that those two
14 principles stated in CLI-86-13, no minimum dose savings, no
15 minimum ETEs, were consistent in the manner in which FEMA had
16 interpreted --

17 A (Cumming) Yes.

18 Q -- its requirements since day one?

19 A (Cumming) Yes, because there are many plants with
20 longer ETEs even than those litigated at Seabrook.

21 Q Indeed.

22 A (Cumming) And there are in fact many plants that
23 have no sheltering for which plans have been approved by my
24 predecessors at FEMA.

25 Q So there is nothing new in that.

1 A (Cumming) I would argue there's nothing new.
2 That's right.

3 What was new was the Commission-level reaffirmation
4 of it, or affirmation of it; whichever.

5 Q But that reinforced FEMA's policy. It didn't cause
6 any change in FEMA's contemporaneous policy.

7 A (Cumming) I don't know whether it did or not,
8 whether it reinforced it or not. I have no knowledge.

9 Q It should have.

10 A (Cumming) It should have, in my judgment.

11 Q It should have.

12 You mentioned that the straw, in your view, that
13 tipped the balance, to mix two metaphors, was this Shep Turk
14 letter of February 18th, correct?

15 A (Cumming) The straw that turned the ship?

16 (Laughter.)

17 THE WITNESS: (Cumming) Yes.

18 BY MS. WEISS:

19 Q Because then you had it in writing; is that correct?

20 A (Cumming) That's correct.

21 Q And then you testified that you had had some
22 conversations with Bill Olmstead who said that he held this
23 same opinion as reflected in the Turk letter. And I just --
24 you know, would like you to tell me who Mr. Olmstead is, and
25 when you had these conversations with him.

1 A (Cumming) Well, I tried to tip you off in my
2 deposition.

3 Q I guess I --

4 A (Cumming) But you didn't listen.

5 Mr. Olmstead and I had the conversation in the
6 January 19th meeting. I thought all throughout my deposition
7 you were going to ask me, what have you meetings been with NRC
8 on this issue. You never asked me. So I never answered.

9 Q That must have been the one subject --

10 A (Cumming) But the truth is it was in the January
11 19th meeting.

12 Q -- on which you were reticent.

13 A (Cumming) No, I even ask Mr. Flynn after the -- I
14 said, why didn't you ask me about the NRC meetings.

15 Q If he'd mentioned total war, I think we probably
16 would not have passed that by.

17 A (Cumming) All-out war, please.

18 Q All-out war.

19 So who is Mr. Olmstead?

20 A (Cumming) William Olmstead is the successor to Ed
21 Christenbury. I don't know if their titles are exactly the
22 same. He's presently on leave of absence to be the executive
23 director of the Administrative Conference of the United States.

24 Q All right. I want to follow up on a comment you made
25 to --

1 JUDGE SMITH: Those positions, everybody know what
2 those are? That's the chief of the Hearing Division that's
3 responsible for the hearing lawyers.

4 Mr. Scinto is now Mr. Olmstead's acting replacement.

5 BY MS. WEISS:

6 Q When you talk about meetings plural with the NRC,
7 were there a series of meetings on the subject of -- that you
8 were involved in?

9 A (Cumming) Okay, the only meeting that I was not
10 involved with with NRC, which I would consider a high level,
11 was the May 19, 1987, so-called steering committee meeting.
12 Okay?

13 Q Yeah.

14 A (Cumming) The June 2nd meeting, I was involved with.
15 The October 15th meeting, I was involved with. And then the
16 January 19th meeting.

17 Q And you said earlier meetings plural with Mr. Stello.

18 A (Cumming) When I came back into the REP program, I
19 became very concerned because William Dirks, who had been the
20 EDO, was -- had some sort of working relationship with the FEMA
21 top brass. This is September 1, 1986, when I came back.

22 I can't remember exactly when Mr. Dirks left and when
23 Mr. Stello became EDO. But I realized that there was so much
24 misinformation throughout FEMA and NRC about each other that
25 there was only going to be resolved by head-to-head meetings.

1 The first issue that precipitated this dealt with
2 whether or not FEMA and NRC were going to appeal an Appeal
3 Board decision, and we felt that it as of significance that we
4 would take it all the way up. And Mr. McLoughlin, at my
5 request, scheduled a meeting with Mr. Stello. And Mr. Stello I
6 have known about although I have not known for a long time,
7 ever since Three Mile Island. And he and Dave McLoughlin are
8 very direct people. And I found the meeting very helpful. And
9 everyone agreed afterwards that there should be more such
10 meetings, although there have been very few, and I am sure
11 after the all-out war Mr. Stello will stay over on his side of
12 the block, and that was the first one.

13 And then the next issue came out with respect to --
14 on October 9th Vic Stello came over --

15 Q Of this past year?

16 A (Cumming) -- with somebody the first week of the
17 hearing up here, and there was discussion of the proposed rule.

18 The next Stello meeting was the very end of the
19 holidays, and it was again on a legal issue, unrelated
20 completely to Seabrook.

21 And the meeting after that was the 19th.

22 Q Okay. On October the 9th you say that he came over
23 and there was discussion of the proposed rule. Was that --

24 A (Cumming) It was on the proposed rule. Basically it
25 was the staff's submission. They wanted to be able to

1 represent that they had at least consulted with the Federal
2 Emergency Management Agency in their submission to the full
3 Commission.

4 I believe you had FOIAed our agency and you have
5 documentation, or whatever documentation exists, or your law
6 firm has, of that meeting.

7 Q Is that the siren rule that we're talking about, or
8 what rule?

9 A (Cumming) No, no. This is the emergency planning
10 rule for utility plants. 5047-(C)(1).

11 Q Good comments you had on that.

12 You mentioned a meeting on October 15, 1987?

13 MR. FLYNN: I object to this line of questioning.
14 We're getting away from this contention. We're getting away
15 from Seabrook. This is discovery. This witness has already
16 been deposed and it is very clear from his answers already
17 today this is subject matter that could have been gone into at
18 the time of his deposition, and wasn't, and it's not relevant.

19 JUDGE SMITH: I guess I -- I forgot to listen for
20 relevance.

21 MS. WEISS: Well I'm just -- I'm following up on an
22 answer the witness gave to a question by -- I'm not sure
23 whether it's -- yes, Mr. Backus.

24 MR. FLYNN: He identified other meetings, but they
25 don't --

1 MS. WEISS: Well, no, no, this is a particular one.

2 MR. REIS: The fact that it's follow up to a question
3 that somebody else got an answer to doesn't show that this is
4 in any way relevant.

5 MS. WEISS: Well, I don't know.

6 MR. REIS: I don't know, unless we can show that the
7 October meeting was in some way relevant to the issues here
8 involving sheltering, we're not --

9 MS. WEISS: I think that --

10 MR. REIS: It should not be permitted.

11 MS. WEISS: Sorry.

12 If I may, Your Honor, my recollection of the
13 testimony is that the witness stated that that was a meeting
14 where Mr. Turk and Mr. Bores were present, and I think,
15 although I may be incorrect, that there was some discussion of
16 Mr. Bores's memorandum that's been introduced in this case of
17 October 15, 1987. The discussion between the agencies on how
18 they should deal with the Seabrook beach population.

E54 19 (Continued on next page.)

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1 JUDGE SMITH: My memory is this morning, that was,
2 that was it, yes.

3 THE WITNESS: (Cumming) My testimony this morning,
4 Judge Smith, was that I didn't include any of the NRC meetings
5 in my testimony because in my considered opinion none of the
6 NRC meetings impacted on how FEMA arrived at its conclusions.

7 JUDGE SMITH: And Mr. Backus suggested that certain
8 other -- after developed other meetings that they should have
9 been, and that was the relevance of it.

10 MS. WEISS: As I recall. Well, I don't intend to
11 belabor this a long time.

12 JUDGE SMITH: Go ahead. But what is the question
13 now?

14 MS. WEISS: There isn't a question pending. The
15 question that I wanted to ask was whether the Bores memorandum
16 of October the 15th, 1987 that's in evidence in this case was
17 in fact given to FEMA at that point, given out --

18 THE WITNESS: (Cumming) No, absolutely not. We
19 didn't receive it until it was served in late December.

20 BY MS. WEISS:

21 Q What was the subject of the meeting?

22 A (Cumming) On September 2nd Dave McLoughlin had
23 written to Vic Stello asking for a meeting, and asking for a
24 discussion on the beach population issue. I believe everybody
25 has that memo.

1 For whatever reason that meeting never came off. And
2 on October 15th that and a lot of other followup issues ended
3 up in discussion.

4 Now, I recall almost no discussion of the Seabrook
5 beach issue except for the fact that Shep and I lived through
6 the first week and we were at least speaking to each other
7 again, you know, and it was nice to see each other in another
8 forum. And I did think it was odd at the time that Bob Bores,
9 and my belief that Bob Bores was there, and it wasn't a
10 significant meeting, it didn't have a significant impact. The
11 real discussion was, what are you guys going to do? What are
12 we -- meaning what are we going to do? And what is NRC going
13 to do with the Seabrook SPMC that had been submitted in late
14 September, particularly in light of the fact that everybody was
15 working then madly on what we were going to do about the rule.

16 And my significant input was, because I had been
17 pushing for a long time to have FEMA adopt procedures to review
18 utility plans. And that was the primary issue.

19 Q So are you saying that what now strikes you odd about
20 that is that neither Mr. Turk nor Mr. Bores told you about the
21 dispute or presented this memoranda about the dispute over what
22 had happened?

23 A (Cumming) Yes, I find that odd.

24 Q That's what I thought. Okay.

25 Now, I believe it was also your testimony that you

1 believed that the New Hampshire plans are adequate or were
2 adequate without any necessity for further consideration -- let
3 me try that -- strike that and ask that question another way.

4 The FEMA supplemental testimony of January 25th
5 without getting the exact words, but in substance, takes the
6 position that before reaching a conclusion on whether elements
7 J-9 and J-10-M are met, it is necessary for the State of New
8 Hampshire or was necessary for the State of New Hampshire to
9 further clarify the use, of which it intends to make, of
10 sheltering, and that's accurate, isn't it?

11 A (Cumming) Yes.

12 Q And I believe you testified this morning that it's
13 your opinion that that really wasn't necessary, you believe the
14 plans were adequate with respect to J-9 and J-10-M as of
15 January 25th without any further elaboration by New Hampshire;
16 is that correct? Are you telling your lawyer to make an
17 objection?

18 A (Cumming) I find this repetitive, but maybe none of
19 the lawyers do.

20 Could you restate the question.

21 MS. WEISS: Could we hear it back.

22 THE WITNESS: (Cumming) I think I heard you state
23 what my testimony was this morning, but maybe I did not.

24 JUDGE SMITH: Your voice fell at the end.

25 MS. WEISS: All right.

1 BY MS. WEISS:

2 Q It was your opinion in January and it is your opinion
3 today that that wasn't correct, that the New Hampshire plans
4 could be found adequate as of January 25th without any need for
5 further submissions by the State on the use it intends to make
6 of sheltering; isn't that what you testified this morning?

7 A (Cumming) There's a little bit of dissynchronization
8 between FEMA's process and the Licensing Board. With respect
9 to the admitted contention I have always felt that sheltering
10 was not legally required. And one of the reasons I felt that
11 is because I knew that FEMA had approved favorable, given a
12 reasonable assurance on plans that did not have sheltering in
13 them prior to our filing our testimony.

14 I thought we were changing our position on this plan
15 at that time. What's really happened is, we did change our
16 position and now we've gone back to our prior position.
17 Because in my judgment, the interim position you could argue
18 that prevailed from June through January was not defensible.

19 Q Well, the answer to my question is, yes, isn't it,
20 you believe that the January 25th supplemental testimony of
21 FEMA is incorrect to the extent that it takes the position that
22 New Hampshire had to state further the uses --

23 A (Cumming) No. The reason I got --

24 MR. DIGNAN: Your Honor, I want to get an objection
25 in here now. Now, this is where it does get to be a problem

1 when people go looking for legal opinions. Now, if she wants
2 to ask, was not -- was or was not legally defensible, that's
3 okay. But when you put it incorrect, you're giving the witness
4 a wife-beating question. Because what this witness has clearly
5 said a number of times is that the legal position that was
6 presented in that testimony was one he felt as a lawyer was
7 legally defensible. In other words, you could ethically defend
8 it. And we all know, those of us who are lawyers, what that
9 means.

10 It does not mean that he thought it was the better
11 legal position.

12 MS. WEISS: I'll accept that.

13 MR. DIGNAN: And you throw that word "incorrect" in
14 there and it becomes a wife-beating question, Judge.

15 MS. WEISS: I'll accept that. Let's go to page two
16 of the FEMA supplemental testimony which is Mass. AG Exhibit
17 42, I think.

18 BY MS. WEISS:

19 Q Are you with me?

20 A (Cumming) Yes.

21 Q We'll go to the top paragraph and the letter "C."

22 JUDGE LINENBERGER: What page?

23 MS. WEISS: Page two, top paragraph letter "C."

24 JUDGE SMITH: That's Exhibit 42.

25 MS. WEISS: It's Mass. AG 42, is that correct? Yes.

1 BY MS. WEISS:

2 Q And that states that FEMA's position is, quote:
3 "That FEMA cannot conclude that the NH RERP is adequate with
4 respect to that beach population until it is clear that the
5 State of New Hampshire has considered the use of sheltering for
6 the transient beach population and explains what use, if any,
7 it intends to make of sheltering," end quote.

8 Now, do I take it that it's your testimony that that
9 is not legally the best statement?

10 A (Cumming) No, I think I understand the confusion.
11 As you may recall from my deposition, in November 3rd the
12 Commission issued a full decision, CLI-87-13, where they said
13 that FEMA's position that sheltering is the preferred
14 protective action for hospitals or for special facilities was
15 not adequate. That full consideration had to be given to all
16 protective actions. In other words, they had to be explored.

17 That was certainly my thinking at the time we wrote
18 this. I personally believe that full consideration has to be
19 given to all protective actions. But whether or not when that
20 consideration is given whether they're required because they're
21 not effective or efficacious or whatever, that's not my
22 position.

23 Q No, that's not what I'm asking.

24 A (Cumming) So that would be my response.

25 Q All I'm asking you is at the time this testimony was

1 written or submitted on January 25th, did you believe that the
2 plans were already adequate with respect to J-9 or J-10-M or
3 did you believe that it was necessary for New Hampshire to make
4 the submittal that's outlined here?

5 MR. FLYNN: Objection.

6 THE WITNESS: (Cumming) I was --

7 MR. FLYNN: Objection. We're getting -- this
8 witness's opinion, independent of his advice to FEMA, his
9 influence on FEMA's decisionmaking and so on is irrelevant.
10 I've refrained from making objections about legal
11 argumentation, about calling for a legal opinion from the
12 witness, but this really crosses over the line. This goes
13 beyond asking what FEMA's position was and why. This is asking
14 for a personal legal opinion from this witness.

15 MR. OLESKEY: Well, this witness isn't here to give
16 personal legal opinions; he's here to give agency opinions and
17 that's what he's being asked about.

18 MR. FLYNN: That's not the question.

19 JUDGE SMITH: Is that your question? Is that the
20 agency's?

21 MS. WEISS: No. What I'm trying to find out, Your
22 Honor, is whether there's a divergence between Mr. Cumming's
23 personal legal opinions and the agency's legal opinions. How
24 much of this testimony are his personal opinions; and how much
25 the agency's opinions; and how can we tell the difference?

1 JUDGE SMITH: He may answer.

2 THE WITNESS: (Cumming) My testimony is presented on
3 behalf of the Federal Emergency Management Agency. It's true,
4 when you question me about prior versions of the testimony, at
5 certain points I personally either agreed or disagreed with
6 portions of the testimony, but overall I felt that they were
7 legally supported, both the June, September and January 25th
8 filings. There was some legal argument which could be made.

9 MS. WEISS: Well, let's just take it one step at a
10 time.

11 BY MS. WEISS:

12 Q It is true that you believed the plans were adequate
13 as of January 25th without any further need for
14 supplementation; that was your legal opinion, correct, as to
15 J-9 and J-10-M?

16 A (Cumming) Actually, in January I was on the "could"
17 side and not the "would" side, as has been testified. I
18 believe that consideration had to be given to that option. It
19 had to be explored. But if it turned out it was not
20 efficacious that did not mean that the plan was not adequate.

21 Your approach, as Counsel Flynn has suggested, is in
22 fact quite accurate, because in my judgment today, my personal
23 opinion would be that this is a legal issue now. However, we
24 have technical testimony to support our position, also.

25 The agency's position is that it's both legal and

1 technical.

2 Q And this testimony on January 25th was approved by
3 Mr. Peterson, correct?

4 A (Cumming) Mr. Peterson, I think, had been sworn in
5 by then but I think -- I'm not sure that he had active
6 participation other than his decision on "could versus would"
7 at the January 22nd meeting. And I think that was a reasonable
8 decision, because all that was really happening is they're
9 saying, explore this option further.

10 Q With respect to the issue of the authority of FEMA to
11 set the standards for radiological emergency planning for
12 nuclear powerplants, was it your testimony that your
13 interpretation on that issue is slightly different from that of
14 other people?

15 JUDGE SMITH: Ms. Weiss --

16 MR. DIGNAN: Everybody in the universe?

17 MS. WEISS: No, I wrote down the words, my
18 interpretation of 350.5 is slightly different from other
19 people, and I just wanted to focus in on what issue you were
20 referring to. I thought that's the issue you were referring
21 to. I know the witness remembers the statement.

22 JUDGE SMITH: Ms. Weiss, we've allowed you to inquire
23 into the difference between FEMA's opinion and Mr. Cumming's
24 opinion. It's not that we didn't recognize the merit to Mr.
25 Flynn's objections, but we felt that it was, as you said, the

1 difference -- who's speaking here, Cumming of FEMA is as
2 important. Furthermore, his testimony has been helpful. I
3 think it's crystallized the issues and that people recognize
4 it. We're all familiar, however, as attorneys that you get
5 into a collegial process you don't always have a way that you
6 come out of a meeting having been heard and you feel
7 comfortable in supporting. Now you're going to beat it to
8 death, I'm afraid, on slight differences.

9 MS. WEISS: No. The only question that I have is
10 whether he knows if the agency has expressed an official policy
11 on that issue, that's my only question on the subject that I
12 intend to ask.

13 JUDGE SMITH: What is the question?

14 MS. WEISS: Well, let's -- whatever it was let's
15 start it over again.

16 BY MS. WEISS:

17 Q You stated that your interpretation of 44 CFR 350.5
18 is slightly different from other people; do you recall that
19 testimony?

20 A (Cumming) Yes.

21 Q And was the issue that you were referring to at that
22 point, the authority of FEMA to set standards for emergency
23 plans for nuclear powerplants?

24 A (Cumming) No. I think everyone in FEMA understands
25 that FEMA has not been delegated any rulemaking authority under

1 the memorandum of understanding from the Nuclear Regulatory
2 Commission. It is also true that with respect to 44 CFR
3 350.5(b), as I expressed this morning, some people didn't read
4 the end of the line. Radiological preparedness, they felt
5 they'd put their emergency planner hat on and they said, hey,
6 for whatever other reasons we know about, and we are involved
7 with other health and safety issues, too, NRC may be -- have
8 the lead on radiological emergency preparedness in some, but
9 with respect to other aspects of emergency planning we have
10 concerns.

11 I think these were legitimate concerns. They were
12 being legitimately expressed. And for whatever reason the
13 agency had a difficult time groping with them. As close as you
14 can come to an analysis. As Ed Thomas's memo from October '86
15 which took nine months or something to get to our office, we
16 asked questions back, there was a meeting. In fact, one
17 critical meeting which apparently occurred on that issue I was
18 not in was on April 8th, a FEMA only meeting on reasonable
19 assurance. Well, I don't know what happened in that meeting.
20 All -- that's one of the meetings I missed.

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1 Q The issue you were referring to on which your views
2 are slightly different from others, is the issue of -- to just
3 shorthand it -- the vitality of 44 CFR 350.5(b)?

4 A (Cumming) Yes.

5 Q Is that it?

6 You said that REP-3, FEMA-REP-3 was promulgated
7 before FEMA had final regs, what was the date that FEMA-REP-3
8 was issued?

9 A (Cumming) Final form I believe was January 1981.
10 Our final regs were published September 28th, 1983.

11 Q When were your rules proposed?

12 A (Cumming) They were proposed twice.

13 Q When was the first time they were proposed?

14 MR. DIGNAN: I object. Isn't this all a matter of
15 not only record, but you can argue it in a brief because it's
16 legal stuff.

17 MS. WEISS: Yes.

18 THE WITNESS: (Cumming) Would you like a copy of --

19 MS. WEISS: No.

20 THE WITNESS: (Cumming) -- the final rule, I
21 believe --

22 MR. DIGNAN: It sounds like a law school exam now,
23 Your Honor.

24 MS. WEISS: I have nothing further.

25 MR. DIGNAN: He got an A.

1 MS. WEISS: Depends on who's grading.

2 MR. DIGNAN: Well, you'd give him at least a B.

3 JUDGE SMITH: Is that the end of your examination?

4 MS. WEISS: On Mr. Cumming.

5 JUDGE SMITH: On Mr. Cumming. Now you're ready to
6 start --

7 MS. WEISS: You know, I thought what we wanted to do
8 was go around on Mr. Cumming

9 JUDGE SMITH: Oh, yes, that's a good idea. All
10 right, do we want to do that? Do we want to take a break?
11 What would you like to do? Let's take a 10 minute break.

12 Oh, how do you feel about the possibilities of ending
13 up this afternoon. We haven't even started on Mr. Keller.
14 Without binding yourself, just put your feeling -- we have --

15 MS. WEISS: I think we probably have an hour and a
16 half between us, maybe two.

17 JUDGE SMITH: So it's still within the realm of
18 possibility. All right. Let's take a 10 minute break, but no
19 more than 10 minutes. You know, now we're getting down to
20 minutes that can make a difference between --

21 MS. WEISS: Official notice that I have been here on
22 time for every break.

23 (Whereupon, a brief recess was taken.)

24 JUDGE SMITH: Mr. Flynn, will you have questions?

25 MR. FLYNN: I have no redirect.

1 JUDGE SMITH: You can be the last questioner. As a
2 matter of fact, you should be. I should not have called upon
3 you now.

4 MR. FLYNN: All right.

5 JUDGE SMITH: Mr. Reis, do you have questions?

6 MR. REIS: Yes, I have one question.

7 CROSS-EXAMINATION

8 BY MR. REIS:

9 Q This testimony of June 10th, 1986, is this testimony
10 the testimony that was approved by the FEMA organization to
11 file in this proceeding?

12 A (Cumming) The testimony of June 10th, 1988?

13 Q Yes, that's right.

14 A (Cumming) Yes.

15 Q And that's the official testimony of the Federal
16 Emergency Management Agency?

17 A (Cumming) Absolutely.

18 Q Thank you.

19 A (Cumming) That's correct.

20 JUDGE SMITH: Mr. Huntington, did you have questions?

21 MR. HUNTINGTON: No, sir.

22 JUDGE SMITH: Mr. Dignan?

23 MR. DIGNAN: No questions.

24 JUDGE SMITH: All right. I guess you can start on
25 Mr. Keller then.

1 MS. WEISS: Okay.

2 FURTHER CROSS-EXAMINATION

3 BY MS. WEISS:

4 Q Good afternoon, Mr. Keller.

5 A (Keller) Good afternoon.

6 Q You are an employee of the Westinghouse Idaho
7 National Engineering Lab; is that correct?

8 A (Keller) No. The laboratory which is a DOE-owned
9 facility is called the Idaho National Engineering Laboratory.
10 It's one of a series of DOE laboratories around the country.
11 These are government owned and company operated, sometimes
12 called GOCOs.

13 The company which I am currently associated with is
14 the Westinghouse Idaho Nuclear Company, Incorporated, which has
15 a contract to operate certain facilities on the Idaho National
16 Engineering Lab for DOE.

17 Q Okay. So you're an employee of the Westinghouse
18 Idaho Nuclear Company?

19 A (Keller) Yes, ma'am, that's correct.

20 Q And that's a subsidiary of the Westinghouse
21 Corporation?

22 A (Keller) Mother Westinghouse, yes. Westinghouse
23 Electric, that's correct.

24 Q And those are the people that designed and built the
25 reactor systems for the Sealrock Station?

1 A (Keller) That's my understanding; yes.

2 Q And you work for FEMA under contract, consultant
3 contract?

4 A (Keller) Not exactly. What Westinghouse Idaho
5 Nuclear Corporation has a contract with the Department of
6 Energy, the Idaho Operations Office of the Department of
7 Energy. FEMA has what is called an interagency agreement
8 between FEMA and the Idaho Operations Office of the Department
9 of Energy which basically says, would you have your contractor
10 do this work for us.

11 Q So it goes FEMA to DOE to Westinghouse?

12 A (Keller) That's correct. All of Westinghouse's
13 money, and hence mine, comes from DOE. They in turn get their
14 money or a portion of it for this work from FEMA.

15 Q And are you hired for specific tasks or contracted
16 with for specific tasks by FEMA through DOE?

17 A (Keller) No. We have what is called -- what we call
18 level of effort contract, which basically says, expend X FTE in
19 this Fiscal Year for tasks as assigned.

20 JUDGE HARBOUR: FTE being?

21 THE WITNESS: (Keller) Full-time equivalence, I'm
22 sorry.

23 BY MS. WEISS:

24 Q And who does the assignment of tasks?

25 A (Keller) The 10 regions and headquarters.

1 Q Are 10 FEMA regions?

2 A (Keller) The 10 FEMA regions. Our contract is a
3 three part contract. There is one part which has to do with
4 the training programs which are carried out at Emmitsburg,
5 Maryland.

6 There is another part which has to do with the
7 production of guidance documents for emergency instrumentation.

8 There is a third and largest part is radiological
9 assistance to the Regional Assistance Committees. And that, by
10 and large, takes the form of exercise scenario review and
11 exercise evaluation.

12 In some regions because of -- they do not have within
13 that region a very much radiological expertise, we are also
14 involved with the review of plans. And in specifically, we're
15 talking about Region 2, the New York region.

16 Q So you've done both review exercises and review
17 plans?

18 A (Keller) Yes, ma'am.

19 Q What -- is it fair to say that the bulk of your time
20 is spent on exercise related activities?

21 A (Keller) I was a witness in the Shoreham
22 proceedings, and in the time that we're talking about last
23 summer, the bulk of my time was spent on Shoreham.

24 Q Is it accurate that your contact with FEMA
25 headquarters, at least with respect to your assignments

1 relevant to the Seabrook case has been with Margaret Lawless?

2 A (Keller) My contact with headquarters is almost
3 exclusively through Margaret Lawless. Margaret Lawless is the
4 contract administrator for this interagency agreement. And
5 therefore I have been instructed that my contact should be
6 through Ms. Lawless. She's my contractor administrator, I'm
7 sorry.

8 Q She would typically call you up and give you an
9 assignment and that's how you'd know what to do?

10 A (Keller) Typically. Now, let me add, as I said, we
11 do respond to all 10 FEMA regions, and we've had this contract
12 in place for about seven years now, seven and a half years.

13 We have a fixed amount of resources, both manpower
14 and dollars. Only when we get assignments or requests for
15 assistance which we can't handle. In other words, if more than
16 one region asks for things and we can't handle the requested
17 activities within the time frame required, we then go to FEMA
18 headquarters and headquarters sets the priority as to which
19 region we will respond to.

20 But if headquarters wants something done, typically
21 it would come through Margaret.

22 Q And it is -- pardon me, is it accurate that your
23 first involvement with the Seabrook beach population issue came
24 after June 4th, '87 when Mr. Cumming sent you a copy of FEMA's
25 position?

1 A (Keller) That's correct.

2 Q And your first work on Seabrook began when Ms.
3 Lawless contacted you in approximately September 1987 and asked
4 you to analyze the timing of potential releases?

5 A (Keller) The time frame is correct. The timing
6 sequence was my -- I was not instructed by Ms. Lawless on what
7 to do.

8 Q What were her instructions to you?

9 A (Keller) Basically, and the exact content of the
10 telephone call I don't remember, but basically, you are aware
11 that we filed this testimony. You're aware of Bores 1 and
12 Bores 2. And when we had -- when we, FEMA, had Bores 1 FEMA
13 was in a position agreeing with the majority of the RAC that
14 there were no problems.

15 And once the information in Bores 2 became available,
16 whether the letter itself was available or not, FEMA position
17 became that there was a serious problem with regard to the
18 beach issues.

19 What can you do from a technical basis to either
20 support or negate our position? And I was the one that made
21 the choice of what to do. I was not instructed to either
22 support the position or to negate the position. What can you
23 do with regard to this position?

24 Q So the decision or what kind of analysis to perform
25 was left totally up to your discretion?

1 A (Keller) That's correct. That's my recollection.

2 Q Did she tell you that Mr. Wingo wanted this done?

3 A (Keller) I believe she did, but I'm not sure on
4 that.

5 Q And would it be accurate -- I'm going to describe in
6 a summary fashion my understanding from the deposition of what
7 it is you did in response to that request. That you went to
8 WASH-1400 for a listing of pressurized water reactor accident
9 sequences, and took the 38 detailed accident sequences
10 contained therein and performed a simple calculation, maybe I
11 should stop there and ask you if everything so far is right?

12 A (Keller) Everything you said is correct. I want to
13 point out that the 38 that I used were the entirety of the
14 sequences in WASH-1400 for which there is detailed time and
15 core fraction releases.

16 Q And those encompass a range from serious releases
17 to --

18 A (Keller) It encompasses a range PWR-1 through PWR-9.

19 Q Okay. And you made assumptions with regard to
20 stability class and wind speed, and using those 38 scenarios
21 you calculated the time at which a person at two miles from the
22 release point would receive a dose in excess of the EPA
23 protective action guides or PAGs; is that correct?

24 MR. FLYNN: Objection, irrelevant. We're going down
25 a line here that has to do with an analysis of the timing of

1 accident, release rates, exposure to the public. We have
2 already represented, and he will confirm if you ask him, that
3 this was not the basis for the testimony which is filed before
4 the Board today.

5 I thought the point of the line of questioning was to
6 get into what support was given or not given to Mr. Thomas, but
7 this level of detail suggest that the purpose is something far
8 beyond that. And whatever it is I submit it's irrelevant.

9 MS. WEISS: Well, the Board will recall that this is
10 the piece of work that Mr. McLoughlin testified was the largest
11 single factor, in his mind, in determining that FEMA's position
12 as presented in June and September ought to be reversed.

13 He said that many times during his testimony. Mr.
14 Krimm also said it. Mr. Thomas testified that when Mr. Wingo
15 told him that FEMA's position had to be changed the source of
16 support he cited for that was the Keller presentation.

17 When Mr. Krimm tried to persuade him he ought to
18 change his position the source that he cited was the Keller
19 analysis and Keller presentation.

20 And I'm going to ask this witness what he did and
21 it's certainly going to be my contention that that was a
22 significant development in FEMA's evolution of its position.

23 I mean, I think the record is perfectly clear that it
24 was.

25 JUDGE SMITH: And all this is in response to Ms.

1 Lawless request that he develop something to support or negate
2 the --

3 MS. WEISS: Exactly.

4 JUDGE SMITH: -- the -- I don't understand your
5 objection, Mr. Flynn. It does seem to be very relevant. I
6 mean, it certainly can be explained and examined on.

7 MR. FLYNN: Well --

8 JUDGE SMITH: It's at least relevant.

9 MR. FLYNN: It's relevant to the evolution of FEMA.

10 JUDGE SMITH: Whether it may be appropriate or not, I
11 don't know. But it certainly is relevant.

12 MR. FLYNN: The problem that I have is this, as I
13 said before we've been very meticulous not to include dose
14 consequence analysis into our testimony or the basis for our
15 testimony. And again, this witness would confirm that.

16 Now, under the guise of probing the evolution of
17 FEMA's position we're getting into the validity of that
18 analysis. And I submit that we are getting very far away from
19 the contention and from the parameters that the Board has set
20 in ruling on the admissibility or the nonadmissibility of the
21 Sholly-Beyea testimony.

22 MS. WEISS: Well, you know, I can assure the Board
23 that I don't intend to get into any detail on the merits of the
24 analysis; I've never seen it. All I know about it is what I
25 know from the depositions. But it certainly was a vital factor

1 in FEMA's thinking in changing its position, and we think we're
2 entitled to know what it was so that we can argue whether it
3 was a rational grounds for changing its position.

4 JUDGE SMITH: You're correct, the testimony is
5 heading into an area which we understand the Commission does
6 not want us to inquire into in assessing -- in a hearing the
7 adequacy of emergency plans.

8 I think, however, we should hear the questions and
9 answers for the purpose stated by Ms. Weiss. If the position
10 changed because of -- in part of inappropriate grounds, I think
11 she has a right to demonstrate that.

12 MR. FLYNN: Even in the face of our representation
13 that this is not the basis for our testimony.

14 JUDGE SMITH: Whose representation?

15 MR. FLYNN: It's mine and I submit that it would also
16 be the witness's.

17 JUDGE SMITH: Let's find out. That may very well be.
18 But I mean, he started out by saying, all right, here's what I
19 started to do, and let's find out if that's the case.

20 I mean, if it is the case we don't have -- we will
21 not accept nor may we accept either directly through him,
22 directly through the testimony or any other way inappropriate
23 considerations for the evaluation of emergency plans.

24 MR. FLYNN: Shall I put the question to the witness?

25 JUDGE SMITH: Well, Ms. Weiss is doing all right so

1 far. Why don't you hold back a minute and just see what we
2 have to do to clean up the problem, if there is one.

3 Wait a minute, hang on.

4 (Board conferring.)

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5 (Continued on next page.)

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1 JUDGE SMITH: One of the things that the Board does
2 have a little bit of confusion in, there's no doubt that Mr.
3 McLoughlin says that's one of the factors that entered in his
4 mind as he began to hear about some of the work that Mr. Keller
5 was doing. I don't know whether it's this exact work or not.

6 MS. WEISS: I represent to the Board that it is.

7 JUDGE SMITH: Well.

8 MS. WEISS: And that the witness will testify.

9 MR. FLYNN: And I don't challenge that. What I'm
10 saying -- the problem is this.

11 We've stated a position. It's in our prefiled
12 testimony. We've outlined the bases for it, and we're prepared
13 to defend those bases. But the bases don't include the time
14 sequence analysis that Mr. Keller did back in October even
15 though it was instrumental in getting the position to be
16 reevaluated in the first place, and that's my concern.

17 JUDGE SMITH: All right. All we're going now -- all
18 we're doing now is challenging the bona fides of FEMA's change
19 in position. This does not mean that through that means you
20 bring into the hearing, the evidentiary record, inappropriate
21 bases for testing emergency planning.

22 MR. FLYNN: Well, I understand. I've made the
23 argument before, and I won't belabor it, that frankly I don't
24 think that the -- the good faith of the agency or not in
25 deciding to reevaluate its position is really in issue.

1 Because the issue, in my estimation, is the position correct
2 and technically defensible.

3 JUDGE SMITH: Well, I know, but the Intervenors have
4 placed it into issue, and we've allowed them to do it.

5 MR. FLYNN: I understand.

6 MR. DIGNAN: But keep in mind what was placed into
7 issue. I really ask the Board to reconsider this ruling for
8 this reason.

9 What was placed into issue is a charge was leveled
10 that this agency had changed its position not for good
11 technical reasons or good legal reasons, but because some sort
12 of outside pressure had been brought upon it.

13 Now we went ad nauseam. We brought three officials
14 up here and asked them about it. The Board had concerns about
15 it and finally said, let the NRC people stay home, because the
16 Board was satisfied the NRC was going to come in here and say,
17 well, they didn't think they were intimidated, but really we
18 did intimidate them, and you will recall all of that.

19 Now having struck out on the political influence
20 line, we're now trying to create a basis supposedly used for
21 this testimony and knock it down.

22 As I understand from Mr. Flynn if the simple question
23 were put to these witnesses, did you rely on this study in
24 developing this testimony, the flat answer will be no.

25 Now once that is said -- once that is said, there may

1 be a great argument that I don't know about that says they
2 should have relied on it, and they'd have a better position if
3 they had. But that's all you get out of that.

4 If the witness says he didn't rely on it, the
5 question of whether you should accept the position now,
6 assuming we're through with the political stuff, and I gather
7 we are, is only whether it stands up technically to analysis.
8 And if the witnesses are saying we didn't rely on this study,
9 you may fault them for not relying on it, or the Board may say,
10 gee, we don't understand why you didn't rely on that because
11 that would have helped your position. But that's what they
12 did.

13 And once you get the answer no to that question, that
14 ends the inquiry into how the study was conducted.

15 JUDGE SMITH: Well, maybe it does, maybe it doesn't.
16 I think this has unfolded very, very logically. Here we are,
17 we have a position. We have filed testimony. Ms. Lawless, the
18 contract officer, calls the man up, what can you do; are we
19 right or wrong. Tell us.

20 He says, all right, I'll analyze it for you. He
21 begins a dose consequence analysis. We don't know how it turns
22 out yet. She hasn't completed her questioning. I don't care
23 how it turns out. If it is an inappropriate basis for us to
24 consider the plans, it won't be.

25 But, nevertheless, it can be brought out to test his

1 direct testimony which he has here.

2 MR. DIGNAN: On the theory, Your Honor, that there is
3 some merit to moving the hearing along, can I beg the
4 indulgence that the Board put in a question, did you rely on
5 this study in developing this testimony.

6 MS. WEISS: We know the answer to that is no.

7 MR. DIGNAN: And if the answer to that is no, then I
8 submit you should cut off interrogation on the study, because
9 it's irrelevant.

10 JUDGE SMITH: Well, how come you were -- why were you
11 doing dose consequence analysis?

12 THE WITNESS: (Keller) Well, I think I was doing
13 probability analysis, not dose consequence.

14 JUDGE SMITH: Okay.

15 MS. WEISS: We were interrupted far too early.

16 THE WITNESS: (Keller) But in the Indian Point
17 hearings, at which I also was a participant, there was
18 testimony on consequence analysis similar to the Sholly
19 testimony. In fact, I believe Beyea and Polenick had offered
20 it. And the Board at that time ruled that it was inadmissible
21 because it did not have the two halves of the risk equation.
22 If you're going to discuss consequences, you have to discuss
23 probabilities also.

24 What I did, because when I analyzed, independent of
25 any legal counsel or anybody's help, I looked at Bores 1 and I

1 looked at Bores 2, and to me the difference between the two was
2 a matter of timing.

3 Bores 1 said we have this -- what I call robust
4 containment, very strong containment. Doesn't say you can't
5 have the accident; said you can't have it fast. So everything,
6 to me at least, revolved around how fast you can have the
7 accident no matter what size it was -- big accident, little
8 accident.

9 So I wanted to look at -- since my understanding was
10 that FEMA had agreed with the majority of the RAC when they had
11 this thing that said you can't have a fast accident, and that
12 FEMA had decided to disagree with the majority of the RAC when
13 they thought you might have a fast accident, look at
14 WASH-1400 to see what could be brought to bear, because in my
15 way of thinking at that time, and it still is, the best
16 analysis of time sequences for potential source terms, and
17 looked at the timings: What could you say about how fast would
18 the EPA PAG be exceed at two, five and 10 miles.

19 I think your question was did I do two miles. And
20 the answer was, no, I did two, five and 10. But that's what I
21 did.

22 Now, after the Board ruled on the Sholly testimony,
23 okay, you had ruled out the dose consequences part. I wasn't
24 going to bring the probability part in, because I think the two
25 are two halves of the risk equation. And, clearly, the risk

1 analysis and final judgment on risk is the NRC's primarily,
2 starting with you people.

3 And when you had said I don't want to talk about
4 consequences, I studiously did not include the probability
5 parts --

6 JUDGE SMITH: Probability parts.

7 THE WITNESS: (Keller) -- in this testimony.

8 Now, we talked about this at length at the
9 deposition, what was done.

10 JUDGE SMITH: So you already know this.

11 MS. WEISS: We sure do.

12 THE WITNESS: (Keller) This was gone over at great
13 length.

14 MS. WEISS: So do they. That's why there are
15 objection.

16 MR. DIGNAN: Yes, but at a deposition you can't
17 object and get it sustained. And now I'm objecting and I want
18 it sustained.

19 MS. WEISS: Your wants are perfectly clear.

20 JUDGE SMITH: So initially you started out to try to
21 explain to FEMA just what was, for their purposes and their
22 concerns, the significance of Bores 2. But in the process of
23 that along came our ruling, and then that came to a dead end,
24 and you didn't use it anymore.

25 THE WITNESS: (Keller) that's correct.

1 JUDGE SMITH: Well, so that's enough, you know.

2 THE WITNESS: (Keller) I think what --

3 MS. WEISS: It's not, Your Honor.

4 Go ahead.

5 THE WITNESS: (Keller) In the deposition I was
6 asked, because I believed that Mr. Thomas had talked to the --
7 I know he had been deposed and was -- voir dire, the same
8 thing -- about this meeting that we had had because we
9 presented -- I presented my part and Dr. Baldwin did a part,
10 and I read the deposition transcripts from day before
11 yesterday, that was discussed here. There was a large
12 discussion on that work.

13 About the same time, at the end of September, the
14 fiscal year comes to a conclusion, and I think you may all know
15 that the Congress did not expeditiously pass a budget. So
16 everybody was working on a continuing resolution.

17 Ms. Lawless called with another task, which we've not
18 discussed anywhere because I was not asked about it. And that
19 was to do a piece on sheltering, the efficacy of sheltering as
20 a protective action.

21 Now since we were working on a continuing resolution,
22 the DOE people, who this contact came through, said, no, no.
23 You may continue to do what you've been doing, but you will not
24 do any new things. So I did not and I have not to this time
25 completed that piece. We had begun to gather some information.

1 We had begun to build the basis for it, but it is not complete.

2 JUDGE SMITH: Now what piece is that again?

3 THE WITNESS: (Keller) This is a generic piece for
4 FEMA in use as a potential guidance memorandum document, right,
5 on the use, the efficacy --

6 JUDGE SMITH: Of sheltering.

7 THE WITNESS: (Keller) -- sheltering as a protective
8 action.

9 I think, in my opinion, there's a historic reason for
10 this. Most of the people in FEMA who have a radiological
11 background have come up through the civil defense program.

12 MR. REIS: Mr. Chairman, can I interrupt?

13 This is going on quite awhile, and I think we've
14 gotten off the subject and we've gotten off the question. I
15 don't know where we are right now, frankly. And I think this
16 may be interesting from a historic point of view, but it
17 doesn't lead to a determination of the questions here.

18 JUDGE SMITH: Mr. Reis, we've allowed the
19 intervenors, because of the very marked change of position of
20 FEMA, and because of other circumstances which we have
21 discussed on several occasions, to inquire into the bases for
22 FEMA's change of position.

23 We've had testimony from the persons who -- the
24 program person who was primarily responsible for the bases -- I
25 mean the grounds for the change, the influences for the change,

1 and he did allude to Mr. Keller's work.

2 The issue that we're changing here -- we're
3 addressing here is should the original position be entitled to
4 rebuttable presumption, one; should the original position rebut
5 the present position, two; or some of all of this, three.

6 but the bona fides and the good faith and the
7 rationale and everything else between the change from position
8 one to the present change has been inquired into. That is the
9 sole basis for it. We are not going into probabilities or dose
10 consequences as a matter of analyzing emergency plans.

11 MR. REIS: I didn't think we were in the testimony
12 that I just heard, but I thought we were going into continuing
13 resolutions of Congress, and I thought we were --

14 JUDGE SMITH: Well, Mr. Keller is trying to be very
15 helpful, and I guess if he could just be allowed to say what it
16 is, we can all get on with it.

17 It does save time sometime if he gets to the
18 narrative statement, gets rid of some of the problems, and we
19 move on. But you're right. Continued resolution is getting a
20 little bit away from it.

21 THE WITNESS: (Keller) But basically I had made some
22 statements to Ms. Lawless about the fact that where we were
23 going on this sheltering study it did not look as though
24 sheltering was going to be a very efficacious protective action
25 in a nuclear power plant emergency.

1 And if that's what FEMA headquarters wanted me to
2 come up with, that's not probably what I was going to have.

3 JUDGE SMITH: Okay.

4 THE WITNESS: (Keller) Now, one more thing.

5 In the meeting with Mr. Thomas on the 28th and 29th,
6 there was a statement in that -- there was a three-page cover
7 letter with some graphs. There was some point bullets if you
8 will, conclusionary bullets. Most of them had to do with the
9 timing and the probabilities.

10 There were statements to the effect that shelter is
11 not very effective and that ground shine dose is the major
12 contributor, much like the testimony that we filed on March
13 14th and June 10th.

14 And how these things meshed together and when people
15 learned things, I can't tell you.

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1 JUDGE SMITH: It suffices to say you have removed
2 site-specific considerations of probabilities and dose
3 consequences from your analysis and from the basis of your
4 testimony.

5 THE WITNESS: (Keller) That is correct.

6 JUDGE SMITH: One other thing. Are you in a position
7 to know whether Mr. McLoughlin, when he was acting deputy
8 associate director, used your work on probabilities as a basis
9 for his concern?

10 If you don't know, that's fine.

11 THE WITNESS: (Keller) I have no way -- I read the
12 transcript. But I have no way --

13 JUDGE SMITH: You don't know what he's talking about?

14 THE WITNESS: (Keller) No, I have no independent
15 knowledge, no.

16 MS. WEISS: Well, I think I'm entitled to follow that
17 up, Mr. Chairman.

18 I mean, you know.

19 JUDGE SMITH: He don't know.

20 MS. WEISS: Well, we can match his testimony up with
21 Mr. McLoughlin's at a later date if you will allow me a few
22 questions on this, and I'm not going to get into the merits of
23 this analysis, but I'm convinced that I can show that this was,
24 this analysis and Mr. Baldwin's analysis are the factors that
25 Mr. McLoughlin testified to were the key factors in changing

1 his mind.

2 JUDGE SMITH: Let's assume that that's the case.

3 MS. WEISS: Then this testimony is --

4 JUDGE SMITH: What's the worst case?

5 MS. WEISS: Then this testimony is misleading,
6 because it --

7 JUDGE SMITH: Whose?

8 MS. WEISS: -- omits -- the FEMA testimony that's
9 been submitted today, because it omits the factor, the single
10 factor that Mr. McLoughlin, who was a senior program official
11 at the time has testified that was the most important in his
12 mind.

13 JUDGE SMITH: All right. How are you going to
14 establish it any better or worse with Mr. Keller?

15 MS. WEISS: Oh, yeah, I can, because I'm going to
16 establish that it was presented at a meeting on a specific date
17 and that's exactly the meeting that Mr. McLoughlin testified
18 to.

19 JUDGE SMITH: Did you -- did you ever make a report
20 based upon probabilities and consequences?

21 THE WITNESS: (Keller) I went to a meeting -- I went
22 to a meeting in Washington, D.C. on the 28th and 29th of
23 November. Mr. McLoughlin was not -- of October, I'm sorry.
24 Mr. McLoughlin was not at the meeting. I had a series of
25 graphs and three typewritten pages. They were draft. They

1 were not a formal report.

2 I had just come from the Ginna exercise; had just
3 gotten this finished before I went to the Ginna exercise. And
4 because of the nature of the report and where we stood, I
5 picked up all the copies. So there was no written material
6 left in Washington, D.C.

7 JUDGE SMITH: But you made a presentation.

8 THE WITNESS: (Keller) I made a presentation.

9 BY MS. WEISS:

10 Q And this is the only work you did on Seabrook in the
11 fall of 1987, correct?

12 A (Keller) This was a nonsite-specific analysis of
13 accidents and timing out of WASH-1400. It was not specific to
14 Seabrook.

15 Q Right.

16 A (Keller) It would have been generic to any
17 pressurized water reactor in the country.

18 Q But it was responsive to Ms. Lawless's request --

19 A (Keller) Ms. Lawless's question.

20 Q -- that you analyze the Seabrook testimony.

21 A (Keller) That's correct.

22 Q And that's the only piece of work you did responsive
23 to that request in the fall of 1987, correct?

24 A (Keller) The work that we were doing on sheltering
25 that she asked me to start, to look at the efficacy of

1 sheltering in general, which was also not specific to Seabrook,
2 but generic to all sheltering at all plants across the country
3 would have just -- had been just as applicable to Seabrook as
4 it would have been to anyplace else.

5 Q You didn't present that at a meeting, did you?

6 A (Keller) That is correct. I did not present that at
7 a meeting.

8 Q This is the only meeting at which you presented this
9 data to FEMA headquarters responsive to Mrs. Lawless's request
10 on Seabrook. That's correct, isn't it?

11 A (Keller) That's correct.

12 Q So don't you know that when Mr. McLoughlin, or Dr.
13 McLoughlin referred to the Keller work in the fall of 1987,
14 this is the work he's referring to?

15 Wasn't any other work.

16 A (Keller) I submit that in the final page of this
17 presentation, the first issue was the probability issue. In
18 other words, the timing issues.

19 Secondly, I mentioned the fact that the sheltering,
20 as I understood it, would not be particularly beneficial
21 because of the low shelter protection factor of the wood frame
22 housing.

23 Thirdly, I included the fact that it was my
24 understanding that from the severe accident sequences the
25 ground shine dose was likely to be the largest contributor and

1 that evacuation would be the most beneficial protective action.

2 All of that was in that meeting.

3 My concern is -- I read the transcript -- the only
4 analytical work that could be called analytical was the time
5 study analysis.

6 Q Right.

7 A (Keller) And I was quite concerned when I read the
8 transcript, because in that transcript, my reading of it said
9 that Dr. McLoughlin referred to my sheltering study. And I
10 had done no analytical work on the sheltering study. And I was
11 quite concerned about what he meant. And I -- I'm not sure.

12 Q Okay. But the fact is that this analytical work that
13 you referred to, without getting into the details of it, the
14 conclusion of it was as you presented it to FEMA on October the
15 28th that the probability of an accident exceeding the PAGs at
16 two miles within one hours after accident initiation was very
17 low, and that was the bottom line.

18 A (Keller) That was a generic statement. It had
19 nothing to do with the containment at Seabrook. That was based
20 on what's in WASH-1400, that's correct.

21 Q Okay. And who was at the meeting?

22 A (Keller) The meeting was not a structured meeting as
23 Mr. Peterson's meeting on March 4th was.

24 Mr. Thomas was present, Mr. Flynn was present, Mr.
25 Cumming was present part of the time, Mr. Sanders was present

1 part of the time. Dr. Baldwin was present, I was present, Mr.
2 Wingo was present of the time, and Ms. Lawless was present
3 part of the time.

4 Q Now, Dr. Baldwin is a consultant from Argonne
5 National Laboratories; is that correct?

6 A (Keller) I'm not sure consultant is the correct
7 term, but they have an agreement similar to the one that I
8 have, and he's from Argonne National Laboratory, that's
9 correct.

10 Q And he also made a presentation at this meeting; is
11 that correct?

12 A (Keller) That is correct.

13 Q And the essence of his presentation was that
14 employing the ETES given in Volume 6 of the New Hampshire plan,
15 he calculated the number of people who would be left on the
16 beach defined as two feet on the sand at various times after
17 beach closing or evacuation notification. He did that for
18 various wind speed assumptions; is that correct?

19 A (Keller) I'm sure that Tom, Dr. Baldwin, did not
20 characterize his work as two feet on the sand. I think I did
21 that in the deposition.

22 But that is essentially a correct characterization of
23 what Dr. Baldwin did, yes.

24 Q Yes.

25 And he presented this analysis saying that it showed

1 that the number of people physically left on the beach when the
2 plume arrives at the beach could be calculated. And for a high
3 wind speed there was 50 percent, 50 percent of the people would
4 get off the sand and 50 percent would be left on the sand,
5 correct?

6 A (Keller) I'm quibbling with your 50 percent at high
7 wind speed. I think the 50 percent was probably at low wind
8 speed and not at high wind speed.

9 But at high wind speed the wind gets there sooner. I
10 mean there's a --

11 Q So there's more people there.

12 A (Keller) -- certain incubation time for people to
13 move, right, and that's pretty independent of the wind speed.

14 If the wind speed is low, more people would get off
15 before the front arrived. If the wind speed is high, a smaller
16 fraction would get off.

17 Q Right.

18 A (Keller) And I just -- I mean generically that's
19 what the presentation was about.

20 If you're asking me do I remember the exact numbers
21 that were presented last October 29th, the answer is, no.

22 Q Well, I could show you your deposition. Would you
23 like to take a look at that?

24 A (Keller) That's fine. Whatever.

25 I mean I had reviewed it at that time because I

1 suspected that that discussion might come up. And I did in
2 fact review the data, and I think I would stipulate that
3 whatever I said in the deposition is much more likely to be
4 correct than what I would recall right now.

5 Q Well, just for -- you know, because the deposition
6 isn't in evidence.

7 Let me see if I can find it and refer you --

8 A (Keller) Oh, wait, I have a --

9 Q -- to the page, and you can refresh your
10 recollection.

11 MR. FLYNN: I have trouble with the relevancy of this
12 line. If the point of this is to establish that Dr. Baldwin's
13 work was incorrect, that's already been established and is not
14 an issue.

15 MS. WEISS: I don't care if it's --

16 MR. FLYNN: If this witness is being tested on how
17 well he understands Dr. Baldwin's work, I submit that's
18 irrelevant, too.

19 MS. WEISS: No, I want --

20 MR. FLYNN: I submit there is just no connection to
21 anything.

22 JUDGE SMITH: I would like to know if the purpose of
23 your examination -- now Dr. -- Dr. Baldwin, what did you say
24 about him, by the way?

25 MR. FLYNN: Excuse me?

1 JUDGE SMITH: What did you say about his work?

2 MR. FLYNN: It's already been established that one
3 of -- that an important assumption in his work was incorrect.

4 JUDGE SMITH: Oh.

5 MR. FLYNN: He misinterpreted, and Mr. Thomas
6 testified about this a couple of days ago, that Dr. Baldwin was
7 interpreting the ETES in such a way that the time he assumed
8 people would be off the beach was, or out of the EPZ was in
9 fact the time they would have cleared the area, so that his
10 times were grossly understated. And we're not disputing that.

11 JUDGE SMITH: Okay.

12 MS. WEISS: Well, that's good, I'm glad, and I'm
13 trying to establish, and I think I have a right to do so, the
14 factors which FEMA had before it at the time it made the
15 decision and that it considered.

16 JUDGE SMITH: And you haven't yet got into Dr. -- Mr.
17 Keller's primary purpose of being here, and that is support his
18 direct testimony.

19 MS. WEISS: That's right.

20 JUDGE SMITH: You haven't got into that yet.

21 MS. WEISS: No.

22 JUDGE SMITH: You're still into the evolution of
23 FEMA.

24 MS. WEISS: That's right.

25 JUDGE SMITH: From his perspective.

1 MS. WEISS: To the extent that he had some direct
2 involvement in it, yes.

3 JUDGE SMITH: Well, that's got a problem.

4 MR. DIGNAN: Well, he's not a witness on the
5 evolution of the NYMA position. He's a contractor who did some
6 work for them. And I don't mean that in a deprecating
7 fashion.

8 JUDGE SMITH: This why I am raising the point. I
9 don't know how competent he is to talk about how his work was
10 perceived and what he did -- how it was perceived. He's from
11 the other end. He had input.

12 MS. WEISS: Well, at the risk of being repetitious,
13 we have the testimony of the key decisionmakers who said they
14 relied on this work, and now we --

15 MR. DIGNAN: Where is that, Ms. Weiss?

16 MS. WEISS: And now we --

17 MR. DIGNAN: I've missed it. Where is it?

18 MS. WEISS: Well --

19 MR. DIGNAN: Could you give me a transcript
20 reference?

21 MS. WEISS: I'm sorry, I can't give it you off the
22 top of my head.

23 JUDGE SMITH: I don't think that's what it was, but
24 it was a recognition of his work. That was one of the elements
25 that began moving Dr. McLoughlin in that direction.

1 MR. DIGNAN: Your Honor's recollection squares
2 exactly with mine. There was a line twice with Mr. McLoughlin
3 in which he was making clear that some things were unsettling
4 to him that he was hearing that led him to start rethinking
5 this problem.

6 One of those things I concede was the Keller work
7 we're talking about.

8 JUDGE SMITH: That's right.

9 MR. DIGNAN: There were a number of others that he
10 said. But I don't recall McLoughlin or any of them saying it
11 was the Keller work which turned the position of the agency
12 around.

13 JUDGE SMITH: No.

14 MR. DIGNAN: Rather, that this was one of the factors
15 that unsettled them, and got them thinking we've got to take a
16 look at what's going on in this situation.

17 Now I may be wrong, but that's my recollection of the
18 McLoughlin testimony.

19 JUDGE SMITH: Well, Ms. Weiss --

20 MR. DIGNAN: If Ms. Weiss can point me to the
21 transcript where McLoughlin said this was a key factor in
22 making the decision to come out on this testimony, I will
23 subside.

24 MS. WEISS: I'm quite sure --

25 MR. DIGNAN: But I don't think she can.

1 MS. WEISS: Well, it may not surprise you that I
2 can't do that this instant, but I can assure you --

3 MR. DIGNAN: Well, do you want to protect the
4 relevancy of the line of cross-examination, it's your
5 obligation to do so.

6 MS. WEISS: That goes to weight, obviously, not
7 relevancy.

8 MR. DIGNAN: No, it goes to relevancy, because if
9 that testimony is not based on that study, and if McLoughlin
10 did not in fact take the position this is what made the agency
11 change its mind, then this line of inquiry is irrelevant, I
12 submit respectfully.

13 MS. WEISS: You would certain agree he said it was an
14 important factor in having --

15 MR. DIGNAN: No.

16 MS. WEISS: Well, you're wrong, and I'm right on
17 that, I promise you

18 JUDGE SMITH: It was significant enough for him to
19 bring it up.

20 MR. DIGNAN: Your Honor's recollection, I quite agree
21 with. He listed a number of things that unsettled him and
22 caused him to start thinking, but that's a long way from it
23 being so key that we take the contractor who did it, and then
24 drill him on the efficacy of the study which he's not relying
25 on.

1 JUDGE SMITH: I have two points I want addressed.
2 One is how long are you going to tolerate Ms. Weiss going
3 beyond the scope of the direct testimony.

4 MR. DIGNAN: I'll tolerate it all afternoon if we can
5 get out this afternoon.

6 MS. WEISS: I don't think it's beyond the scope of
7 the direct. The direct purports to present the factors which
8 were --

9 JUDGE SMITH: Mr. Cumming's.

10 MS. WEISS: -- most critical to FEMA. It says legal
11 and other considerations.

12 JUDGE SMITH: Yes, but I don't see -- I mean, I saw
13 Mr. Keller's testimony here to be for the purpose of supporting
14 the technical basis for their present position.

15 However, no one is objecting provided it's done in
16 the correct context. So you have that opportunity.

17 MR. DIGNAN: I heard a hint. It's beyond the scope
18 of the direct, and I object. The purposes of the witnesses --
19 these particular witnesses, as I understand it, was not to test
20 the concept of the efficacy of the change of position, but
21 rather, to present the position and defend it technically.

22 JUDGE SMITH: Mr. Keller's appearance here, as I
23 understand it, was clearly for that.

24 MR. DIGNAN: So I object.

25 MS. WEISS: Press the question.

1 JUDGE SMITH: Well, Ms. Weiss, do you want to offer
2 any reason why you should be allowed to do it?

3 I mean, will you address my concern, and say I'm
4 right, or wrong, or what?

5 MS. WEISS: Didn't both of these witnesses now
6 expressly avow all of this testimony, and they removed the
7 prior distinctions -- the distinctions in the old testimony, or
8 some testified to -- Keller testified to one part and Cumming
9 testified to the other part?

10 And I am directly impeaching the credibility of this
11 listing of factors that were important in FEMA changing its
12 position.

13 MR. DIGNAN: Yes, but Cumming defended that.

14 JUDGE SMITH: Mr. Cumming.

15 MS. WEISS: They removed all distinction in their
16 testimony, and they now both expressly are here to testify
17 about the whole thing.

18 MR. DIGNAN: Oh, okay, that's easy.

19 JUDGE SMITH: Ms. Weiss --

20 MR. DIGNAN: Ask him if he agrees with Cumming's
21 prior testimony. If he does, we'll quit. And if he doesn't,
22 you can have a ball.

23 MS. WEISS: He already swore to it. You want to ask
24 him if he agrees, you go ahead. He lifted up his hand and
25 swore.

1 MR. DIGNAN: No, I'm talking about Cumming's prior
2 testimony today.

3 MS. WEISS: That's yours.

4 MR. DIGNAN: Ask him if he agrees with it.

5 MS. WEISS: If you want to ask it, you ask it.

6 MR. DIGNAN: Well, then what are we impeaching?

7 JUDGE SMITH: Let's find out.

8 Mr. Keller, how do you understand your presence here
9 today? What are you doing here?

10 (Laughter.)

11 THE WITNESS: (Keller) I don't think I should answer
12 that one.

13 Trying to be helpful to the Board.

14 MR. DIGNAN: You're a real FEMA witness.

15 THE WITNESS: (Keller) Right. Okay.

16 Clearly, clearly my primary input was to the
17 technical aspects of this testimony. I did have some input to
18 what we've been calling Mr. Cumming's legal aspects, because I
19 had been through Shoreham. I had been through Indian Point.
20 So I did have some suggestions on that.

21 It is perfectly obviously that Mr. Cumming is much
22 more able to defend those kinds of discussions than I am. I
23 did, I believe, pass him a few things this morning that he used
24 in his discussions. So I do support what he said earlier.

25 There is also an administrative problem which I

1 believe that Mr. Cumming and Mr. Flynn went through yesterday
2 when you all started before I got here.

3 My management in Idaho said that I will not sit here
4 at this table without a FEMA presence next to me. And I
5 thought there was at least a possibility that the legal
6 argument might be moved to be struck because it was legal
7 argument.

8 JUDGE SMITH: Are you -- do you feel that you are
9 competent to explain the links of the chain of events that
10 caused FEMA to change its position from the originally filed
11 testimony to the present testimony? Have you been privy to
12 that decisionmaking process?

13 THE WITNESS: (Keller) Insofar as what I know about
14 it, yes, I could defend it.

15 JUDGE SMITH: And would you describe just what you do
16 know about it?

17 THE WITNESS: (Keller) Most of my information I
18 obtained from Mr. Cumming in -- Mr. Cumming transmits
19 information data and copies of transcripts, and
20 indiscriminately.

21 JUDGE SMITH: He is one of those.

22 THE WITNESS: (Keller) He's one of those.

23 MR. OLESKEY: Very forthcoming.

24 THE WITNESS: (Keller) He's very forthcoming, yes.

25 On that basis I think that I had copies of all of the

1 paperwork that has been cited and involved in all of this
2 testimony long before the testimony was put together.

3 JUDGE SMITH: But you were not part of the
4 decisionmaking process in changing the testimony.

5 THE WITNESS: (Keller) March 4th, yes.

6 JUDGE SMITH: You were.

7 THE WITNESS: (Keller) Prior to March 4th, I was at
8 the March 4th meeting in which I had drafted a significant
9 portion of the draft testimony with the conclusions statements
10 pretty much as it stands in this June 10th testimony, that was
11 taken to the meeting that Mr. Peterson chaired that you all
12 discussed at some length several weeks ago. And I was in that
13 meeting.

14 THE WITNESS: (Cumming.) Judge Smith, may I add
15 something?

16 JUDGE SMITH: Yes, please.

17 THE WITNESS: (Cumming) I've also read Mr.
18 McLoughlin's testimony before the Board, and I believe that I
19 understand what happened. And if it's important to the Board,
20 I would be more than happy to explain my understanding of what
21 happened.

22 I also think that an erroneous impression has been
23 left with the Board that Dr. Baldwin's work was wrong. That is
24 not my understanding. Dr. Baldwin clearly described the
25 limitations on his work. Neither it or Mr. Keller's work was

1 utilized because I brought to the attention the fact that the
2 Sholly testimony was very close to the work that was done by
3 Mr. Keller in that late October period.

4 What I had done from June on was say, hey, guys, I
5 think what we're doing here is inconsistent with the position
6 we've testified to and I just finished litigating in Shoreham.
7 And Keller keeps telling me that there are severe limitations
8 on sheltering.

9 And I think that that understanding was in Dave
10 McLoughlin's mind when he went through the period of time so
11 that his understanding was different.

12 Now he usually have a very clear recollection of
13 things, but I think in this case he was just incorrect. And
14 It's true --

15 MS. WEISS: Mr. Chairman, I move to strike that
16 references to what was in Mr. McLoughlin's mind, especially
17 when we have Mr. McLoughlin's testimony.

18 JUDGE SMITH: Well, you're examining Mr. Keller at
19 length trying to -- trying to impute to us what Mr.
20 McLoughlin's state of mind was.

21 MS. WEISS: I'm doing something completely different.
22 I'm trying to --

23 JUDGE SMITH: Well, then, I don't understand what
24 you're doing.

25 MS. WEISS: (Keller) -- put on the record -- I'm

1 trying to put on the record objective evidence about what was
2 the information presented to FEMA; what did they have before
3 them at the pertinent time, from which I intend to argue that
4 there was no rational basis.

5 JUDGE SMITH: But you've got a breach between what
6 was put in and what Mr. McLoughlin took out.

7 MS. WEISS: No, I have --

8 JUDGE SMITH: Nevertheless, would you move to it, and
9 I'm not going to allow you to do it very much, but move to it
10 and establish point by point what those items of information
11 you believe were present which could have been absorbed by FEMA
12 officials in --

13 MS. WEISS: That's exactly what I am attempting to
14 do.

15 JUDGE SMITH: All right. But move to it, and it is
16 beyond the scope. However, this is your opportunity, and we're
17 going to finish up.

18 BY MS. WEISS:

19 Q Well, we have the description of your -- Mr. Keller's
20 analysis that purported to show that the probability of an
21 accident exceeding PAGs at two miles is very low, within one
22 hour after onset of accident conditions, which is how you
23 defined a fast-breaking accident. And you presented that to
24 FEMA.

25 And Mr. Baldwin presented his analysis to FEMA which

1 purported to show that some people would get off the beach,
2 defined as two feet off the sand, by the time the plume arrived
3 for that fast-breaking accident, correct?

4 A (Keller) That's correct.

5 Q And Mr. Baldwin did not calculate it and made no
6 representations about where the people would be other than that
7 they wouldn't have two feet on the sand; is that correct?

8 A (Keller) With the caveat that we discussed a few
9 minutes ago; that that was not Dr. Baldwin's representation.
10 But if we'll take that characterization, yes, that is correct.

11 Q That's correct. And what you're differing with is
12 the two feet off the sand.

13 A (Keller) Yes, right.

14 Q But in fact that's factually accurate.

15 MR. REIS: Mr. Chairman --

16 THE WITNESS: (Keller) Well, it was not discussed in
17 that light. It was they would have left the beach.

18 BY MS. WEISS:

19 Q And they might be -- they might be --

20 MR. REIS: That's my problem. We're dealing with
21 hearsay here. What Mr. Baldwin said, and I can't tell whether
22 left the beach means left the beach area, left the Seabrook
23 town, or got off the sand.

24 MS. WEISS: That's the question, Ed.

25

1 BY MS. WEISS:

2 Q The analysis was solely limited to they were off the
3 beach. They were not out of the EPZ. They were not out of the
4 two mile zone. They could have been in their cars.

5 JUDGE SMITH: Ms. Weiss, all we're going to be able
6 to accomplish this afternoon and through these witnesses is a
7 mere characterization of the information which was before FEMA
8 which you believed had been available for consideration in the
9 evolution of their position.

10 MS. WEISS: Exactly.

11 JUDGE SMITH: You're not going to get into the merits
12 of it.

13 MS. WEISS: No.

14 JUDGE SMITH: Can't do that.

15 MS. WEISS: No. No intention of doing that.

16 JUDGE SMITH: Because if the characterization doesn't
17 do it, then you don't have it.

18 MS. WEISS: No intention of getting into the merits.

19 (Continued on next page.)

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1 BY MS. WEISS:

2 Q I think just to tie this up because you've been doing
3 a lot of nodding that isn't going to be reflected on the
4 transcript.

5 I am accurate that Mr. Baldwin tracked the people as
6 far as the edge of the beach, made no analysis of how far they
7 would get by the time the plume arrived, whether they would be
8 out of the two miles or out of the EPZ; correct?

9 A (Keller) That's a correct statement.

10 Q And it's accurate, isn't it, that none of your work,
11 your probability analysis that we've been describing from
12 October is inconsistent with the statements on page 39, the
13 famous page of the September 11th, '87 FEMA testimony, that
14 thousands of people could be on the beach throughout the entire
15 duration of the release?

16 MR. DIGNAN: Under what circumstances?

17 MS. WEISS: Whatever the circumstances are on page
18 39.

19 MR. DIGNAN: Well, that was always my trouble with
20 39, Mr. Weiss, I didn't get any circumstances on 39.

21 MR. OLESKEY: It's not our testimony, Tom.

22 MR. DIGNAN: I know.

23 Now, could we have that parameter before the witness
24 is asked to give what is now an expert opinion well beyond the
25 scope of direct? What accident are we talking about?

1 MS. WEISS: We'll focus on the exact words of the
2 old testimony on page 39.

3 THE WITNESS: (Cumming) Did you say old testament?

4 MS. WEISS: Yes. The September 11th testimony. What
5 did I say, testament.

6 (Simultaneous conversation)

7 MS. WEISS: No, that's your frame of reference, Bill,
8 that's not my frame of reference. I take a teleological --

9 JUDGE SMITH: That's outdated testimony.

10 MS. WEISS: The outdated testimony, right. The
11 September 11th testimony.

12 THE WITNESS: (Keller) I disagree with that
13 statement.

14 BY MS. WEISS:

15 Q You say that there is -- there was something in
16 your --

17 MR. DIGNAN: What statement?

18 THE WITNESS: (Keller) The one she read to me on 39,
19 I thought.

20 MR. DIGNAN: She didn't read any.

21 THE WITNESS: (Keller) Oh, I'm sorry. I thought she
22 directed me to a statement -- I'm sorry.

23 MS. WEISS: Could we have -- maybe we should have the
24 question first and then the answer.

25 MR. DIGNAN: But I like the answer.

1 (Laughter)

2 MR. OLESKEY: You'll love the question.

3 (Laughter)

4 MS. WEISS: This is not Jeopardy. Okay.

5 BY MS. WEISS:

6 Q Focusing on the sentence that begins the last
7 paragraph, it the jollity would recede, "Therefore using the
8 standard guidance for the initiation and duration of
9 radiological releases and the current New Hampshire RERP
10 including ETE, it appears that thousands of people could be
11 unable to leave during an accident at Seabrook involving a
12 major release of radioactivity without adequate shelter for as
13 much as the entire duration of that release," end quote.

14 My question is, any of the work you did in October
15 was inconsistent with that statement?

16 MR. DIGNAN: This is what I object to. Without a
17 parameter and the way this is framed it doesn't go, and here's
18 my reason, Your Honor, I'd like to be heard. This was the
19 problem with the original testimony in the Thomas theory, you
20 could have a major accident with a major release, but because
21 the release doesn't occur for 20 hours you could have everybody
22 out of Seabrook and down in bed in Boston.

23 And this has been the thing I have been fighting in
24 this case for two years. It's this ethereal accident that
25 nobody puts a parameter on. And if you're going to ask -- if

1 we're going to get into this stuff which I think is irrelevant
2 and well beyond the scope of direct, before the witness is
3 asked does he agree or disagree with that statement I think a
4 parameter ought to be put in as to what accident we're talking
5 about.

6 MS. WEISS: Well, let's use the --

7 JUDGE SMITH: I don't want to go into the accidents.

8 MR. DIGNAN: Well, neither do I, Your Honor, but you
9 granted the leave for her to go beyond the scope and I'm just
10 doing the best I can --

11 JUDGE SMITH: I granted leave for her to characterize
12 those items of information, not on the merits of them, but
13 simply to characterize them which she believes were before the
14 decisionmakers at FEMA as to which they could have availed
15 themselves in the evolution of their position.

16 Now, I would have expected a flurry of objections
17 when she asked that question, because I think she's going to go
18 straight where we told her she couldn't go, into the --

19 MR. DIGNAN: Well, I don't know if you got a flurry,
20 but you've got one.

21 JUDGE SMITH: Yes.

22 MR. REIS: You have another one.

23 MR. FLYNN: I'll join.

24 MR. REIS: On the grounds that it doesn't even go to
25 the development of the FEMA position set out in the June 10th,

1 1988 plan.

2 JUDGE SMITH: Well, she's rehabilitating the old one.

3 See, this is --

4 MR. FLYNN: But that's --

5 JUDGE SMITH: You have to have been here to
6 appreciate where we are. You just can't get to where we are.

7 MS. WEISS: If it will help, this is the last
8 question.

9 MR. DIGNAN: Don't take a lead in an objection until
10 you've been here a --

11 MS. WEISS: If it will help this is the last question
12 on the subject.

13 MR. DIGNAN: No, it won't help. Without the
14 parameter I object to the question, even within the scope of
15 the Board's ruling that you can go beyond the direct.

16 MS. WEISS: I'll do a parameter.

17 JUDGE SMITH: She is withdrawing the question and
18 you're going to ask --

19 MS. WEISS: No. Well, no, I'll give him a parameter.
20 I'll give him a parameter, fast-breaking accident as you define
21 it.

22 MR. DIGNAN: No.

23 MS. WEISS: An accident where the release begins half
24 an hour after onset of accident.

25 MR. DIGNAN: No.

1 JUDGE SMITH: Sustained. For the reason I stated,
2 Ms. Weiss, you were not simply characterizing the work that he
3 did which may have been before the FEMA officials. You are
4 going now into the merits of the originally filed testimony
5 trying to use his work to support it, and you can't do that.

6 MS. WEISS: Well, let me make an offer of proof, the
7 witness can answer, yes, and I'll support it by the deposition
8 when I get back to my office.

9 JUDGE SMITH: Okay.

10 MS. WEISS: But the witness would answer, there is no
11 inconsistency.

12 MR. DIGNAN: You're really going to try that offer
13 when he's already said he didn't agree with the statement?

14 MS. WEISS: Yes. I've got it in the deposition.

15 MR. DIGNAN: All right.

16 BY MS. WEISS:

17 Q Let's go to your work on the testimony.

18 JUDGE SMITH: Well, you want to make your offer of
19 proof now -- can you do it now?

20 MS. WEISS: Oh, yes.

21 MR. DIGNAN: She did. She says she's offer to prove
22 he would have answered her question yes.

23 JUDGE SMITH: Oh, okay.

24 MS. WEISS: I said he -- I think I'll do it myself,
25 thank you very much.

1 My offer of proof is that the witness would answer
2 that his analysis of October was not inconsistent with the
3 statement that I just read from page 39 of the testimony.

4 JUDGE SMITH: Okay.

5 BY MS. WEISS:

6 Q Subsequent to the October 28th meeting where you
7 presented your analysis and Dr. Baldwin presented his analysis,
8 is it accurate that your next contact with these issues came in
9 early 1988 when Ms. Lawless called to tell you that FEMA might
10 want you to get more involved?

11 A (Keller) That's what I said at my deposition and I
12 was in error. Immediately after the meeting of October 28 and
13 29, I had contact with FEMA headquarters, basically it's kind
14 of summation sort of thing of what happened at the meeting, and
15 what I thought of the meeting.

16 So technically, I had more contact but substantively
17 it was about the same sort of thing that was in the October 28
18 and 29 meeting.

19 Q And who did you talk to on that occasion?

20 A (Keller) Ms. Lawless, and I believe -- I know I
21 talked to Ms. Lawless and I think I spoke to Mr. Wingo also.

22 Q Did you present any written material?

23 A (Keller) Nothing was ever official transmitted, no,
24 except verbally.

25 Q Did they say to you that they had made a presentation

1 to Mr. McLoughlin or intended to make a presentation to Mr.
2 McLoughlin?

3 A (Keller) They made no such representation, no.

4 Q Do you have any reason to know whether there was a
5 presentation of this work made to Mr. McLoughlin?

6 A (Keller) Mr. McLoughlin stated in the March 4th
7 meeting that he had been briefed by Mr. Wingo, aside from that.

8 Q Okay. That's good.

9 All right. With that aside, then your next contact
10 came in early 1988 with a phone call from Ms. Lawless; is that
11 correct?

12 A (Keller) That's correct.

13 Q But you were not given a specific assignment at that
14 time?

15 A (Keller) That's correct.

16 Q And it wasn't until March the 1st of 1988 at a
17 meeting at FEMA headquarters that you were asked by Mr. Flynn
18 if you wanted to draft the technical basis for the current FEMA
19 testimony; is that correct?

20 A (Keller) Well, we've left out one minor point. I
21 was asked to attend the RAC meeting of February 29th, so that I
22 could hear, even though there was going to be a transcript, so
23 that I could hear the discussions that went back and forth
24 preparatory to drafting technical testimony, so that is a
25 little ahead of March 1st. Maybe a little bit.

1 Q Was that the first RAC meeting on Seabrook you had
2 attended?

3 A (Keller) That's correct.

4 Q Have you attended any since?

5 A (Keller) Well, no, I have not attended another RAC
6 meeting on Seabrook.

7 Q All right. And then we come to March 1st and you
8 have a meeting at FEMA headquarters and Mr. Flynn asks you if
9 you want to draft the technical basis for the current
10 testimony; is that accurate in substance?

11 A (Keller) In substance, yes.

12 Q And I believe you testified you were a little annoyed
13 with Mr. Flynn because you couldn't get him to focus with any
14 degree of precision on what it was exactly that you were to do?

15 A (Keller) I did say that, and I was a little annoyed,
16 but I think we got a date -- there's one day -- one day shift
17 here. The RAC meeting was on the 29th, in the morning of March
18 1st I had a meeting with the subcommittee on Instrumentation of
19 the FRPCC, Federal Radiological Preparedness Coordinating
20 Committee that Mr. Krimm chairs. There was an instrumentation
21 subcommittee and that's the group that we write these guidance
22 documents for.

23 So that morning I had a meeting with that group, and
24 in the afternoon I met with Dr. Hock for the first time to
25 brief her on what had been transpiring with the SPMC plan

1 review and verification from the week before.

2 So the testimony work started very late in the
3 afternoon on the 1st and actually was primarily on the 2nd.

4 Q The drafting of the testimony took place primarily on
5 the 2nd of March?

6 A (Keller) Yes, ma'am.

7 Q And you did that in conjunction with Mr. Flynn; is
8 that correct?

9 A (Keller) Yes, ma'am, and I had some input from my
10 co-witness, Mr. Cumming.

11 Q And it's true, isn't it, that the only parts of the
12 New Hampshire RERP which you reviewed were those portions
13 attached to the February 11th, 1988 response from Mr. Strome to
14 the FEMA supplemental testimony?

15 A (Keller) That's correct.

16 Q And when were you give those?

17 A (Keller) Sometime after the 11th. I have no clear
18 recollection of the day that I got them. But in the time
19 frame, I would say within a week of the 11th.

20 Q And do you recall testifying at your deposition that
21 it was your understanding at that time that the New Hampshire
22 RERP does not provide a sheltering option under some scenarios
23 for the entire transient beach population?

24 A (Keller) I think I would put it, that they only
25 consider sheltering for the entire beach population under

1 certain very limited scenarios, but, yes, that -- the answer to
2 your question is, yes.

3 Q So, at the time you gave your deposition it was your
4 understanding or you testified that it was your understanding
5 that the plan did not provide a sheltering option for the
6 general beach population?

7 A (Keller) That's correct.

8 Q Is it true that the conclusions in your testimony
9 related to the relative efficacy of the shelter first versus
10 the immediate evacuation strategies rely in no way on data
11 assumptions or evaluations specific to the Seabrook site?

12 A (Keller) That's correct.

13 Q Your analysis is entirely generic to any nuclear
14 powerplant; correct?

15 A (Keller) Light water, light water uranium-fueled.
16 The kinds of powerplants we normally deal with, yes, that's
17 correct.

18 Q And you have no calculations or analyses for the
19 fast-breaking accident at Seabrook that demonstrate any
20 particular level of dose reduction associated with an immediate
21 evacuation strategy, do you?

22 A (Keller) That's correct.

23 Q And you don't have any calculations showing any
24 particular level of dose reduction for the fast-breaking
25 accident associated with a shelter first, evacuation later

1 strategy --

2 A (Keller) These are all generic kinds of analyses.

3 Q If I could direct your attention to page eight of
4 your testimony, your current testimony.

5 A (Keller) Page eight.

6 Q The second full paragraph, the second sentence and
7 I'll read it: "The transient beach population is treated as a
8 special population and the special considerations afforded this
9 special population include precautionary action such as early
10 beach closure and emergency classification level (ECLs) prior
11 to the necessity for consideration of protective actions for
12 the general public," end quote.

13 Isn't it true that the only special consideration
14 afforded this special population is early beach closure?

15 A (Keller) There is also early evacuation at the site
16 area emergency. The beach closure is at the alert. There
17 isn't a beach evacuation at the site area.

18 Q All right. Well, those are --

19 A (Keller) Yes.

20 Q Some people call that one, but I'll accept -- but
21 that's it, that's the universe of special precautionary actions
22 for this special population?

23 A (Keller) Precautionary actions, yes.

24 Q And isn't it also true that for the fast-breaking
25 accident, as you define it, and that is the major release

1 occurs, within a half an hour of the onset of accident, you
2 would not have either early beach closure or early evacuation
3 because by definition that accident would start at a site area
4 or general emergency?

5 A (Keller) I believe my definition of the fast-breaker
6 was an hour.

7 Q An hour, okay.

8 A (Keller) Not the half hour. I don't know that for a
9 fact. I mean, you could have an accident which sequenced
10 through the lower classification levels and still had the
11 release and major release within an hour. So I don't know for
12 a fact that that's the only time you could do that. But I will
13 agree that there are sequences that would -- that could start,
14 basically, at a general emergency classification. And that a
15 release could occur relatively rapidly. And in those sequences
16 whatever their probability is or whatever their likelihood of
17 occurring is, you would not have the early precautionary
18 actions for the beach -- the general beach population.

19 Q They would be simply inapplicable and obviously they
20 would provide no additional protection?

21 A (Keller) Past the fact.

22 Q Right.

23 Is it accurate to say that your belief that there
24 will be some dose savings afforded the beach population for
25 fast-breaking accidents is based on your opinion that some

1 undetermined number of people will be able to move off the
2 beaches before they're exposed to the plume?

3 A (Keller) Yes.

4 Q But you don't know how many; that's correct?

5 A (Keller) That's correct.

6 Q And you don't know how far they would get; that's
7 correct?

8 A (Keller) And I don't know where the plume would be.
9 And I don't know the width of the plume. And all the things
10 that I don't know lead me to a generalized conclusion that
11 there would be some dose savings in this portion of the
12 accident spectrum, which is only a part of the full accident
13 spectrum, whereby, even in the fast-breaking accident which has
14 a release of activity relatively quickly, that some exposure
15 would be -- those would be eliminated or reduced, a reduced
16 dose even in that circumstance, yes.

17 Q And that's as far as you're willing to go on an
18 assertion that there would be some dose savings without further
19 elaboration as to how much or who it is --

20 A (Keller) If you're asking for a hypothetical, if you
21 want to define all the parameters I'll give it a go. But as a
22 generic general statement that there is a broad spectrum of
23 accidents, as a part of that spectrum, okay, all from one end,
24 but it's a part of the spectrum, without any regard to the
25 likelihood of that end of the spectrum occurring, and with any

1 regard to the magnitude of the potential doses in that end of
2 the spectrum, I don't know what the plume width is. I don't
3 know what the travel time is. I don't know what the release
4 height -- the effective height of the plume release is. I
5 don't know what the meteorology is. But it is my belief that
6 the immediate evacuation of the people on the beach would
7 reduce -- would result in some dose savings.

8 Q Would you agree that evacuation must begin before or
9 shortly after a release for it to reduce the risk to the public
10 substantially?

11 A (Keller) That clearly is the most appropriate. But
12 I can postulate accidents in which that would not necessarily
13 be the case, but in general, yes, it should occur either before
14 or shortly after the start of the release, yes.

15 JUDGE SMITH: Was that responsive?

16 BY MS. WEISS:

17 Q Well, I think you did eventually agree that that was
18 correct; right?

19 A (Keller) Yes, I did.

20 JUDGE SMITH: Well, could I have the question back.

21 (Whereupon, the reporter played back the last
22 question and answer.)

et/60 23 (Continued on next page.)

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1 JUDGE SMITH: I don't think that was responsive.

2 THE WITNESS: (Keller) To be frank, I did not hear
3 all the question. I heard it better when it was read back.
4 Ms. Weiss asked me to reduce risk to the public.

5 JUDGE SMITH: Substantially.

6 THE WITNESS: (Keller) Substantially reduce risk to
7 the public. And that's not our call. The risk situation,
8 which risk reduction is not a FEMA -- that's not under the
9 purview of what FEMA does.

10 BY MS. WEISS:

11 Q Okay. So you were -- what you thought I said was to
12 reduce doses --

13 A (Keller) Yes.

14 Q -- substantially.

15 A (Keller) That's right.

16 Q And the question and answer should be understood with
17 that in mind.

18 A (Keller) Yes, yes.

19 JUDGE SMITH: I assumed that it was dose. You still
20 think it's responsive?

21 THE WITNESS: (Keller) Yes, I do. Sure.

22 JUDGE SMITH: Okay.

23 BY MS. WEISS:

24 Q Would you also agree that for a severe release as
25 those are defined in WASH-1400 -- I don't know if defined is

1 the right words, but classified or set forth in WASH-1400 --
2 the major portion of the radioactive material is released
3 within a half to two hours after the onset of the accident?

4 MR. FLYNN: I'm sorry. Was there a question there?

5 MR. DIGNAN: Is that the question? Because if it is,
6 I object.

7 MS. WEISS: Yes, that's the question.

8 MR. DIGNAN: Has the question ended?

9 MS. WEISS: Yes.

10 MR. DIGNAN: Objection.

11 MR. FLYNN: I didn't hear her question. I just heard
12 an assumption.

13 JUDGE SMITH: What's the question?

14 MS. WEISS: Would he agree that for this severe
15 accidents in WASH-1400, the severe release, the major portion
16 of the radioactive material is released within a half to two
17 hours after onset of the accident?

18 MR. DIGNAN: Objection; relevancy. We're heading
19 into consequence as sure as I sit here.

20 MS. WEISS: There's nothing quantitative about it.
21 We're talking about the effectiveness of evacuation as opposed
22 to shelter, and are there going to be any dose reductions for
23 certain kinds of accidents. I think that's a perfectly fair
24 question.

25 MR. DIGNAN: I agree, that question would be fair,

1 but that's not the question you asked him.

2 MS. WEISS: I don't see that.

3 JUDGE SMITH: Ask it --

4 MS. WEISS: I don't see anything wrong with that.

5 JUDGE SMITH: Which question did you ask now? Which
6 question do you believe that you've asked?

7 MS. WEISS: Well, since I'm reading it off this
8 paper, I'm pretty sure I asked the same one, which is, does he
9 agree that for a severe release, as those are listed in WASH-
10 1400, the major portion of the radioactive material is released
11 within one-half to two hours after onset of accident
12 conditions.

13 MR. DIGNAN: Is the --

14 MS. WEISS: The warning time is one and a half to two
15 hours.

16 MR. DIGNAN: Is that the question? Is the question
17 what does 1400 say?

18 MS. WEISS: Yes.

19 MR. DIGNAN: Well, then I object, because the
20 document speaks for itself. That's simple.

21 MS. WEISS: I'm not going to -- it's not in evidence.

22 MR. DIGNAN: That's pop quiz time again, does he know
23 WASH-1400.

24 MS. WEISS: No. The work that he did in October
25 involved these scenarios from WASH-1400.

1 JUDGE SMITH: Well, you've passed along now. You're
2 attacking his direct testimony?

3 MS. WEISS: Yes.

4 JUDGE SMITH: What part of his direct testimony?

5 MS. WEISS: Well, it goes to the question of whether
6 there are dose savings from evacuation.

7 JUDGE SMITH: Vis-a-vis shelter.

8 MS. WEISS: You know, the witness has agreed with me
9 that you've got to get an evacuation started in order to reduce
10 doses substantially early.

11 JUDGE SMITH: You know, he says he did, but I didn't
12 hear him say that. I still think that was nonresponsive, but
13 he's the best judge of that.

14 MS. WEISS: And, you know, I believe he would answer
15 that the serious accidents in WASH-1400 involve warning times
16 generally of one and a half to two hours, from which I intend
17 to argue that for the severe fast-breaking accident there is
18 not significant dose reductions from evacuation.

19 MR. REIS: Mr. Chairman, I object.

20 MS. WEISS: And I'll make that as an offer of proof.

21 MR. DIGNAN: Well, you can argue that all you want.
22 But how is that question relevant to this testimony?

23 MS. WEISS: Because he's testified --

24 MR. DIGNAN: I'm sorry, Your Honor. I shouldn't
25 argue with counsel.

1 MS. WEISS: -- that there is some dose reduction.

2 MR. DIGNAN: I object to the question. It's beyond
3 the scope of direct. I object to the question on the grounds
4 that the document speaks for itself, the exact question that's
5 on the table now. And I further object on the grounds that
6 we're headed right into consequence analysis as I see it. One,
7 two, three, those are the reasons.

8 MR. REIS: Your Honor, I have another objection. The
9 purpose of emergency planning is to reduce doses from a
10 spectrum of accidents. When we separate out certain accidents
11 and talk about those that have special consequences at certain
12 times, we're no longer talking about whether it meets the
13 spectrum of accidents that can happen.

14 And what we're talking about is --

15 MS. WEISS: Those are the ones you need emergency
16 planning for --

17 MR. REIS: -- planning for a spectrum of accidents
18 and not for individual accidents, and we're separating out
19 individual accidents.

20 JUDGE SMITH: Well, Mr. Reis, the Intervenors have
21 been litigating almost exclusively the end of the spectrum
22 which relates to the fast-breaking severe accident, and
23 although you are correct, they have staked out that end of the
24 spectrum for their litigation.

25 MR. REIS: I respect what has gone before in this

1 hearing, and I realize I just arrived today.

2 JUDGE SMITH: No, no, you are exactly right.

3 MR. REIS: It doesn't make it right.

4 JUDGE SMITH: You are exactly right. But would you
5 carry the argument through? I would like to hear the argument
6 carried through that if it is within the spectrum of the
7 accident, why can they not address it?

8 I mean, if it is within the spectrum of accidents why
9 they cannot address it.

10 MR. REIS: There's no question that it is within the
11 spectrum of accidents. However, the question involved is
12 whether looking at all those -- that spectrum of accidents you
13 will reduce dose, not necessarily of every individual accident
14 that could occur, but from the universe of accident that could
15 occur.

16 MS. WEISS: Well, that's a legal argument. You make
17 it after you put your evidence in.

18 JUDGE SMITH: Well, that may be -- that may be, but
19 they wish to demonstrate that as to the edge of the spectrum,
20 that may or may not be true.

21 MR. REIS: Your Honor, I think that's irrelevant and
22 I think it's --

23 MR. DIGNAN: Well, at the edge of the spectrum,
24 their -- I apologize.

25 MR. REIS: -- contrary to what the Commission has

1 said in the past. And I'll let it rest there, and those are
2 the grounds of my objection.

3 MR. DIGNAN: Well, Your Honor, accepting their --
4 they want to litigate the edge of the spectrum. The one thing
5 that's clear is the edge of the spectrum, as I understand it,
6 Mr. Thomas's far edge of the spectrum is the one-half hour to
7 release.

8 And assuming the sequence takes place, and we go up
9 through the sequence, there is some notification time, and as
10 two plus two follows four, there is going to be some dose
11 savings assuming a plan is in effect, because somebody, some
12 group is going to move in that half-hour.

13 JUDGE SMITH: Well, you see, this is where I got in
14 trouble.

15 MR. DIGNAN: And that's where I'm falling off the
16 track here as to relevancy.

17 JUDGE SMITH: Here is where I got into trouble with
18 his answer to the other question of Ms. Weiss. I still think
19 it was not responsive.

20 MS. WEISS: Well, it doesn't do any good if they move
21 into the plume. If they don't get out of the two miles, it
22 doesn't do any good.

23 MR. DIGNAN: Well, you're right, and you know what,
24 if a whole bunch of people stand there and say, shoot me in a
25 bank robbery, they're going to get killed.

1 But the purpose of the plan is that people react to
2 direction. That part of that direction is to tell them where
3 to go and how to get there.

4 MR. FLYNN: I don't accept the statement that even if
5 they remain in the plume, there is no dose savings.

6 JUDGE SMITH: Well, that's my problem. See, that's
7 why I felt that his answer was not responsive. I think it
8 assumes something that was not in the question. I think his
9 original answer assumed that there is a comparison with
10 sheltering, and that was not in the question. And I don't
11 understand the answer which says that even a late evacuation
12 cannot achieve significant dose savings. I don't understand
13 that. I've lost the thread of the questions and answers, and
14 I'm at a loss now to get involved in what's going on here.

15 MR. DIGNAN: I think the witness took the question,
16 and I confess I did, too, and maybe I misheard it, as a
17 comparative question.

18 JUDGE SMITH: No, it was not a comparative question.

19 MR. DIGNAN: Well, if that be the case, then I agree
20 with you. The answer was not responsive.

21 JUDGE SMITH: And now I understand Ms. Weiss's
22 question now to be going to a comparison because it's directed
23 to the sheltering -- evacuation versus sheltering issue, and it
24 has to be a comparative question before it makes any sense.

25 MS. WEISS: It doesn't have to be comparative. I

1 mean, their position is that the range of protective actions
2 must achieve some dose savings. That's their argument.

3 JUDGE SMITH: Right.

4 MR. DIGNAN: On a spectrum of accidents.

5 MS. WEISS: Let me finish.

6 And that means evacuation only for these fast-
7 breaking accidents for the beach population. And I think we
8 have a shot at establishing that there is no significant dose
9 savings for those people.

10 JUDGE SMITH: All right.

11 MS. WEISS: And that's what this is --

12 JUDGE SMITH: Fine, you have a shot at establishing
13 it providing that you establish it with a full understanding of
14 what your question is, and that it's --

15 MS. WEISS: Well, there is a question pending.

16 JUDGE SMITH: And the question is, does he agree that
17 some of the accidents in WASH-1400, or a substantial part of
18 the spectrum is fast and severe.

19 MS. WEISS: Well, the warning time for evacuation
20 ranges from a half to two hours.

21 JUDGE SMITH: All right. Would you agree that that's
22 the case?

23 THE WITNESS: (Keller) For some accidents, I would
24 agree that the warning time. However --

25 JUDGE SMITH: And these are the accidents upon which

1 we're planning.

2 THE WITNESS: (Keller) Those are part of the
3 spectrum of which we're planning.

4 I would like to call people's attention to NUREG-0654
5 on Page 17, and it says, the time at which a major portion of
6 the release may occur, and I believe your question was major
7 portion. And it says, .5 hours to one day after the start of
8 the release.

9 MS. WEISS: Right.

10 THE WITNESS: (Keller) And I believe your question
11 had in it me agreeing with one or two hours after start of the
12 release. And I don't want to agree with the one or two hours,
13 because we would prefer to go by 0654, and it clearly says one
14 day.

15 BY MS. WEISS:

16 Q At one end?

17 A (Keller) Hm-mm?

18 Q One day at one end, and a half an hour at the other
19 end.

20 A (Keller) Yeah.

21 Q Right?

22 A (Keller) Right.

23 Q Okay.

24 A (Keller) But this kind of helps to define the
25 spectrum.

1 And the second question that I agreed with, what is
2 the warning time, doesn't have anything to do with how long. I
3 mean, not necessarily it doesn't have to. Some accidents
4 indeed could have the hour to hour and a half warning time.

5 Q Accidents within the planning spectrum?

6 A (Keller) Within the planning spectrum. Some.

7 Q Let's go to Page --

8 JUDGE SMITH: I think maybe I just -- are you happy
9 with where you are now?

10 MS. WEISS: I thought I was.

11 JUDGE SMITH: All right.

12 MS. WEISS: Maybe I'll confer with my co-counsel. I
13 may be missing something, but they can help me with it.

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1 BY MS. WEISS:

2 Q Okay. Still on page eight of your testimony, the
3 second full paragraph, the first sentence: "The response by New
4 Hampshire to the FEMA supplemental testimony is adequate in
5 concept." Who wrote that?

6 A (Keller) I did.

7 Q Is the adequacy of the New Hampshire RERP something
8 that you as a consultant to FEMA are authorized to interpret?

9 A (Keller) I have been directed by Mr. Flynn to state
10 that I am authorized to speak for FEMA; yes.

11 Q So you're authorized to reach conclusions with regard
12 to the adequacy of the New Hampshire plan for FEMA?

13 A (Keller) You've got to remember that this has been
14 reviewed at a relatively high level. I cannot say for sure
15 that this final piece of paper went all the way to Mr.
16 Peterson, but I know that Mr. Peterson approved what we had on
17 March 4th, I was present. During that meeting he said, there
18 will be some word engineering, and there was. But that
19 statement was in the March 4th draft, because I wrote it.

20 Q And you wrote it on the basis of a review of the New
21 Hampshire plans that consisted solely of the portions attached
22 to the February 11 submission by Mr. Strome; that's correct?

23 A (Keller) We are restricting it, and looking at it
24 now I understand maybe your concern. This statement has to do
25 with the plan with respect to the transient beach population

1 only. It is not -- it is not a statement anymore global than
2 that. And it basically is intended to track the statement
3 that's the last line of the conclusion, if you will, or the
4 last -- yes, the last sentence of the conclusion.

5 Q Okay. Let's go to the conclusions on page 11. The
6 first sentence, "The requirement for a range of protective
7 measures has been satisfied even though the State of New
8 Hampshire has chosen not to shelter the summer beach population
9 except in very limited circumstances," end quote. Who wrote
10 that?

11 A (Keller) I think maybe I did, but I'm not absolutely
12 positive.

13 Q That's not a conclusion that you're authorized to
14 reach as a consultant of FEMA, is it?

15 MR. FLYNN: I've got a problem with the question.
16 First of all, it's ambiguous. What does it mean, he's not
17 authorized to reach -- he can't think that. He can't say it.
18 FEMA sponsored him. Put him forward to defend this testimony.
19 He agrees with it. I don't know what more we need to know. If
20 the question is, what is the extent of his authority? It's a
21 fundamental principle of agency law that you don't prove
22 authority by the testimony of the purported agent.

23 I don't understand where this is going.

24 MS. WEISS: Well, the fact of the matter is that we
25 don't have a witness on this panel who participated in the

1 official decisionmaking for the agency on whether the range of
2 protective actions has been met or planning elements J-9 and
3 J-10-M have been met; was in the chain of command for reaching
4 that decision.

5 MR. FLYNN: That's a -- I submit that's a silly
6 assertion. We have on this panel Mr. Cumming, we have Mr.
7 Keller who were there on March 4th when this was discussed.
8 You have had three other participants including the associate
9 director of FEMA who were also at that meeting and who have
10 testified and been examined at length.

11 I don't understand why this has any bearing or is
12 important to the development of this case.

13 JUDGE SMITH: Who is defending that conclusion?

14 MR. FLYNN: Well, they both are. And in addition,
15 Mr. Peterson, McLoughlin and Krimm defended it.

16 MS. WEISS: None of them had even read the New
17 Hampshire plans. FEMA hasn't given us anybody who has read the
18 New Hampshire plans.

19 THE WITNESS: (Cumming) That's incorrect.

20 JUDGE SMITH: I don't know where we are.

21 THE WITNESS: (Cumming) I've read portions of the
22 New Hampshire plan.

23 MR. DIGNAN: There's testimony here that says, FEMA
24 says it's adequate. They sent two guys down to defend the
25 proposition that this is the conclusion; what's the problem.

1 MS. WEISS: I'm entitled to show that the people
2 they sent to defend the conclusion haven't read the New
3 Hampshire plan.

4 (Simultaneous conversation)

5 JUDGE SMITH: Okay.

6 MR. DIGNAN: That doesn't mean he still got holy
7 orders, what's the difference.

8 MS. WEISS: Haven't read the New Hampshire plan.
9 Yes, that's right.

10 MR. OLESKEY: He's the sexton.

11 MR. DIGNAN: Fine. He can perform certain sacraments
12 and one of them is testifying in front of the NRC.

13 MS. WEISS: I think that allows me to argue about the
14 weight of the testimony, wouldn't you say.

15 JUDGE SMITH: All right. Go ahead, establish it and
16 argue it.

17 MR. FLYNN: Well, but the issue is his familiarity
18 with the plan; it's not his authority.

19 JUDGE SMITH: Well, she's going beyond authority now
20 into competence to defend the conclusion.

21 BY MS. WEISS:

22 Q The fact of the matter is that neither of you gentlemen
23 have read the New Hampshire radiological response plan?

24 A (Cumming) That's incorrect.

25 Q You've read some of it?

1 A (Cumming) Volumes 1 and 4.

2 Q One and four, you didn't read volume six. And you've
3 read what was attached to the Strome letter?

4 A (Keller) And I also said in my deposition that I had
5 read certain other portions of the plan that had to do with
6 accident assessment in regard or in the light of my assignment
7 at the exercise of February of '86.

8 Q And that's it? That's the only other part of the
9 plan you've read?

10 A (Keller) Yes.

11 Q And neither of you is within the chain of command in
12 this agency for making the determination on whether the
13 planning elements had been met? You're not on the RAC and
14 you're not in any of the offices that have program
15 responsibility for that?

16 MR. FLYNN: Objection, irrelevant, for the reasons
17 that I stated a moment ago.

18 MR. DIGNAN: Your Honor, I submit that the witnesses'
19 responsibilities and positions with the agency have been and
20 will be established and Ms. Weiss is free to argue that. And,
21 you know, if that's the boat you're floating the case in I'll
22 tell the client to get ready to get the ticket.

23 MS. WEISS: We do this in little parts.

24 MR. DIGNAN: I know you do. So do I, so let's go,
25 let's get out of here.

1 MS. WEISS: He answered the question, yes, I believe.

2 JUDGE SMITH: What's the question?

3 MS. WEISS: Could I have it back.

4 JUDGE SMITH: No, just tell him what it is. It takes
5 a long time.

6 MS. WEISS: I mean, I honestly don't remember. But
7 the question was, neither of these gentlemen are in the chain
8 of command within FEMA for making a decision on whether
9 planning elements, J-9 and J-10-M, have been met?

10 JUDGE SMITH: All right. Did you answer that as
11 correct?

12 THE WITNESS: (Cumming) I have read volumes 1 and 4
13 and volume 6 is largely ETES, and I have read all the testimony
14 filed before this Board which I would argue to some extent
15 supplements and updates this. So, if Ms. Weiss wants to rely
16 on the fact I have not read volume 6, and I may have read it in
17 the past, but I don't remember.

18 MS. WEISS: Mr. Cumming --

19 JUDGE SMITH: Her question now is you're not in the
20 decisionmaking chain.

21 BY MS. WEISS:

22 Q Of course, it's not what you've read. You don't have
23 -- you don't make those decisions at FEMA; those are made by
24 program people, none of whom have been presented here?

25 A (Cumming) I would argue, and I have read Mr.

1 McLoughlin, Peterson, and Krimm's testimony that they didn't
2 have to review the plan to review the concept. We are saying
3 it's adequate in concept. And that's why it's approved.

4 Q No, no, I directed you to a particular finding that
5 planning elements J-9 and J-10-M have been met in your
6 conclusions?

7 A (Cumming) Yes, and I will --

8 MR. FLYNN: I object. And again, the point is, it is
9 not a requirement anywhere that FEMA send the top management or
10 the ultimate decisionmaker to defend the decision. And this--

11 JUDGE SMITH: Well, that may exactly be true, and
12 we're familiar with that. That does not change the fact that
13 she can identify to what extent they are in the chain of
14 command for making these decisions. And I would imagine that,
15 you know, it's -- simply because a question is asked does not
16 mean that that position is the correct one or not the correct
17 one. It does not carry with it to prove to the Board that
18 their testimony is flawed because General Becton is not here.

19 But we allow the questions anyway because they are
20 relevant and they are appropriate argument for her to make.

21 JUDGE HARBOUR: I don't know where the chain of
22 command starts at the top and I certainly don't know where it
23 stops at the bottom. So I think you have to be more specific
24 as to what you mean by chain of command.

25 MS. WEISS: Well, let's get the rules out. Although

1 I'm confident that Mr. Cumming knows these by heart.

2 JUDGE SMITH: Well, you know, I don't understand
3 where you're going. I heard Mr. Cumming testify, and I heard
4 other testimony about his involvement in the evolution of their
5 position and everything, and I don't know, it seems to me that
6 he was involved sufficiently in the decisionmaking process, at
7 least to be able to come here and tell us about it.

8 MS. WEISS: Well, he gave legal advice, there's no
9 question that he --

10 JUDGE SMITH: And he was a part of the program
11 development --

12 (Simultaneous conversation)

13 MS. WEISS: The fact of the matter is --

14 THE WITNESS: (Cumming) I'd like to make a couple of
15 comments, if I may.

16 MS. WEISS: -- there's been no witnesses that are
17 competent to defend the agency's decisionmaking on J-9 and
18 J-10-M.

19 MR. FLYNN: Well, who besides Ed Thomas.

20 MR. DIGNAN: Excuse me. Could I draw an
21 analogy --

22 MS. WEISS: Is he the agency's decisionmaker --

23 JUDGE SMITH: Let Mr. Dignan --

24 MR. DIGNAN: Could I make an analogy to the NRC.
25 Now, I've been in that game a while. I admit I'm not familiar

1 with FEMA. I have never understood it to be the law or even
2 the suggestion of the law that the EDO, for example, has to
3 come in and defend every SER of the NRC. Indeed, the
4 regulations say, the EDO will make available such witnesses as
5 he deems necessary to come down and defend the technical
6 conclusions of the Nuclear Regulatory Commission.

7 JUDGE SMITH: You're exactly right, Mr. Dignan, but
8 that does not prevent somebody asking questions about it.

9 MR. DIGNAN: I concur. I have not objected to the
10 question. What I don't understand is why Cumming -- excuse me,
11 gentlemen. Mr. Cumming, Dr. Keller can't be asked simply,
12 what's your position with the agency? Answer it for the second
13 time, because they've already answered it once or twice. And
14 then that's the end. Let's go from there.

15 And if she wants to argue this means that their
16 testimony is no good, terrific, I'll take care of that in the
17 brief.

18 But this idea, I respectfully submit, that somehow
19 there's an issue of whether General Becton or Mr. Peterson has
20 to be sitting in that chair for this to be good and admissible
21 testimony to be relied on is crazy. Because on that basis
22 every NRC proceeding in history is crazy, because we just send
23 down a technician to defend it.

24 MR. REIS: Mr. Chairman, let me say this. We've
25 established -- I think it's already been established, that this

1 testimony is the official testimony of FEMA. It has been
2 established that this is the approved position of the agency,
3 qua the agency, at least that's what they submit.

4 Now, the question before the Board is, can these
5 witnesses defend this testimony and is it also their opinion,
6 because obviously, people that the agency send should be the
7 ones to defend it. And that's the question that's here.

8 And I look at the two sentences that were said, the
9 agency has said the requirements are met, that that was the
10 agency's judgment and the agency said it as a corporate
11 position.

12 The sentence before is the requirement for a range of
13 protective measures has been satisfied even though they haven't
14 chosen to shelter. Again, that's the corporate position.

15 Now we can go to the basis of that and whether it's
16 right or wrong. But I think the very submission of this paper
17 and the fact that we have the counsel of FEMA here submitting
18 it establishes that it is the position of FEMA.

19 JUDGE SMITH: I agree.

20 MR. REIS: And I don't know where we're going. And
21 therefore I object to the line. If the line wants to go, is
22 this supported, that's fine.

23 MS. WEISS: There's no line; there's one question.

24 JUDGE SMITH: I beg your pardon?

25 MS. WEISS: There's no line; there's one question

1 pending.

2 JUDGE SMITH: And could you tell me once more what
3 that question is.

4 MS. WEISS: The question is whether either of these
5 gentlemen are within the chain of command in FEMA for making
6 decisions as to whether planning elements, J-9 and J-10-M, have
7 been met with respect to the Seabrook plan.

8 JUDGE SMITH: You could say yes or no.

9 THE WITNESS: (Cumming) I would argue, yes, I am,
10 because to an extent there's a legal analysis that put me in
11 the chain of command upon which the agency relied.

12 I would also state that I read the Peterson, Krimm,
13 McLoughlin piece, and in fact they were questioned de facto on
14 certain portions that related to this testimony, irrespective
15 of whether or not they stated they had read the specific plan,
16 they certainly defended the conclusion that's stated here.

17 Also, we have a RAC report where other federal
18 agencies said the J-9 and J-10-M were adequate with respect to
19 the beach population.

20 MS. WEISS: Mr. Cumming, you want to sit in that
21 chair? Well, do you want to be a witness or a lawyer here.

22 JUDGE SMITH: You asked for it and you got it.

23 MS. WEISS: No, I didn't ask for that.

24 JUDGE SMITH: Well, you didn't expect it, but that's
25 what you asked for.

1 MS. WEISS: No. It was nonresponsive.

2 BY MS. WEISS:

3 Q Let's focus on the last sentence in your conclusions,
4 quote: "There exists a technically appropriate basis for the
5 choice made by the State of New Hampshire not to shelter the
6 summer beach population except in very limited circumstances,"
7 I'm sorry, that's the next to the last, here comes the last:
8 "At the same time whenever this choice is incorporated into the
9 NH RERP implementing detail will be necessary."

10 And my question is, isn't it true that the New
11 Hampshire RERP already includes a shelter option for the beach
12 population as a whole?

13 A (Cumming) The version I talked about, basically, had
14 rejected sheltering until it was subject to the submissions in
15 February where it was reopened.

16 Q Well, fact of the matter is, the current plan
17 contains circumstances under which --

18 A (Cumming) Yes, three limited options for sheltering.

19 Q Right. And without any implementing detail; correct?

20 A (Cumming) Yes. That's why we put this in here.

21 Q Well, why is FEMA requiring -- whoa. You mean that,
22 you're saying that they have to supply implementing detail for
23 the general beach population, sheltering of the general beach
24 population?

25 A (Cumming) Okay. The normal procedure, and this is

1 reflected purely going back to the fact as to where the Zimmer
2 Board which ruled that a formal FEMA finding was not necessary
3 for a Board to pursue the issue of whether the plan was
4 adequate, causes us to have this operation here, moving in
5 parallel with the normal process.

6 There was a RAC meeting on May 25th. I am not the
7 RAC chairman. There was also a finding that's progressing to
8 whatever its eventual conclusion. But -- and this is my
9 understanding of what's occurred. Everyone on the RAC has
10 consistently stated that with respect to the beach population
11 J-9 and J-10-M is adequate.

12 Q Let's focus on the sentence. You say, when the
13 choice is incorporated into the NH RERP, and you agree with me
14 that there is a sheltering option in the NH RERP. And then the
15 sentence says, "Implementing detail will be necessary." I
16 think you'd also agree with me there's no implementing detail?

17 A (Cumming) It is somewhat unusual, perhaps, but we
18 are saying that the plan is adequate in concept.

19 Q But you expect implementing detail -- let's be very
20 clear about this.

21 A (Cumming) Before FEMA issues its final finding, yes,
22 it expects implementing detail.

23 Q For the general beach population, the 98 percent?

24 A (Cumming) Yes.

25 MS. WEISS: Bingo. No further questions.

1 JUDGE SMITH: Ms. Sneider, did you have questions?

2 MS. SNEIDER: Yes, I do.

3 JUDGE SMITH: How long will you be going?

4 MS. SNEIDER: I expect half an hour.

5 JUDGE SMITH: Okay.

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6 (Continued on next page.)

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CROSS-EXAMINATION

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BY MS. SNEIDER:

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Q Mr. Keller, the New Hampshire RERP assigns dose reduction factor for cloud shine of .9 to the beach area shelters; is that correct?

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A (Keller) The houses in the beach area, that's correct, yes.

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Q Okay. And I'd like you to assume that there is an accident at Seabrook station and the plume of radiation travels over the beach area.

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Now according to the dose reduction factors ascribed in the New Hampshire RERP, a person sitting in one of those shelters in the beach area would receive approximately 90 percent of the cloud shine dose that he or she would receive if sitting in a car next to that shelter for the same period of time; is that correct?

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MR. REIS: Mr. Chairman, again I object to the line referring to specific accidents and specific doses that might be received. And although it's talked about in terms of percentage, it is going to specific doses.

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MS. SNEIDER: Your Honor, I think this is an area that's been gone into before. And when FEMA draws a conclusion that it's better to evacuate immediately than to shelter and then evacuate, I think this is very relevant, because it's FEMA's witness that has said that the doses would be less from

1 an immediate evacuation strategy, and this gets right to the
2 point. I don't understand how else we can explore that.

3 JUDGE SMITH: Well, how else can that premise be
4 tested other than some -- she's not talking about dose
5 consequence. She's talking about dose savings. And how else
6 can you test that premise?

7 I don't know. I'm wondering about it. I hope you
8 can be helpful on it.

9 We've had testimony, you know, that the shelter gives
10 so much reduction and the cars give so much and not so much,
11 and how can you test that without some reference to dose --

12 MR. REIS: In that respect, I will withdraw the
13 objection provided that we're going in that direction.

14 MS. SNEIDER: Well, we're going to a comparative
15 between the two strategies.

16 JUDGE SMITH: She's going to almost a -- not a dose
17 conse -- you're not going into a dose amount --

18 MS. SNEIDER: Right.

19 JUDGE SMITH: -- comparison. You're going into,
20 based upon the evidentiary record we already have now as to
21 dose reductions available from sheltering, dose savings
22 available from sheltering, a comparison.

23 MS. SNEIDER: Exactly.

24 BY MS. SNEIDER:

25 Q Can you answer the question?

1 A (Keller) If I recall the question correctly, and I
2 believe you said that the individual in this shelter, this
3 home, would receive 90 percent of the dose, cloud shine dose
4 that he would have received, for example, in a car outside the
5 home.

6 If that was the question, I would agree, yes.

7 Q Okay. And any benefit that the person might receive
8 from essentially sheltering in a car would be even less if the
9 windows to the car are open; is that right?

10 A (Keller) Well, you need to be a little more specific
11 in your hypothetical. I mean there are several modes of
12 exposure.

13 Q I'm talking about cloud shine.

14 A (Keller) Since the car is assumed to give zero -- a
15 protection factor of 1, it doesn't make any difference if he's
16 in the car or standing outside the car. So it doesn't make any
17 difference if the car windows are open or if the car windows
18 are not open.

19 Q Okay.

20 A (Keller) So in that regard, I disagree with your
21 statement.

22 Q Okay, I'll take that up again.

23 I'd like to turn now to inhalation exposure, and do
24 you know what the New Hampshire RERP assumes as the air
25 exchange rate for shelters in the beach area?

1 A (Keller) It's either one every two hours, or two
2 per hour, and my -- it's a one and a two, and I can't remember
3 which is it.

4 Mr. Cumming says it's two per hour, and I'll accept
5 that characterization, too.

6 Q Okay.

7 A (Keller) It was one or the other.

8 Q Okay. Well, I'd like you to assume as the New
9 Hampshire RERP does provide that the shelters -- of an air
10 exchange rate of two exchanges per hour, and assume again that
11 there is a release of radiation from Seabrook Station and the
12 plume travels through the beach area.

13 Isn't it correct that a person sitting inside beach
14 area shelter for a period of two hours would receive less
15 inhalation dose than if he or she were sitting in a car next to
16 that shelter for the same period of time?

17 A (Keller) I can't answer the question.

18 The important point is now are the windows opened or
19 closed. I mean --

20 Q Well, first assume that the -- well, okay.

21 A (Keller) If the windows are closed and the
22 ventilation is off, there is not that much difference because I
23 don't know the air exchange rate of the car.

24 Q Okay.

25 A (Keller) But if on the other hand the windows are

1 open, then the individual in the shelter would receive less
2 inhalation dose than the individual in the car.

3 Q Okay. And assume it's a hot summer day. Do you
4 think it would be possible for a person to sit in the beach
5 area in their car with the windows closed for two hours and
6 live?

7 MR. FLYNN: Objection. Argumentative.

8 JUDGE SMITH: Let's give him the window down. Will
9 you accept the window down scenario?

10 THE WITNESS: (Keller) Sure.

11 MS. SNEIDER: Okay.

12 BY MS. SNEIDER:

13 Q And with respect to cloud and inhalation doses -- did
14 you already -- excuse me, I thought you had answered the
15 question.

16 Assume the windows are down and compare the dose a
17 person would receive in the shelter to the doses in the car.

18 A (Keller) It would be less than the person who was in
19 the car.

20 Q Okay. In fact, the inhalation dose for the person in
21 the car would be virtually the same as if the person was
22 standing outside so long as the windows are open; is that
23 correct?

24 A (Keller) That is correct.

25 Q And with respect to cloud and inhalation dose, the

1 time frame of most concern is the time period during plume
2 passage; is that correct?

3 A (Keller) The time frame that the individual is
4 emmersed in the plume or is under the cloud shine; that's
5 correct.

6 Q Okay, now I'd like to turn to ground shine dose.
7 Your testimony at Page 9 states that, "In severe
8 accident sequences, the ground shine component is most likely
9 to be the major contributor to total dose if no protective
10 actions are taken."

11 Is that right?

12 A (Keller) I think that's correct, yes.

13 Q But it's true, isn't it, that not all accident
14 sequences would involve a ground shine component?

15 A (Keller) It is possible that you could have an
16 accident sequence which does not include a ground shine
17 component; that is correct.

18 Q And would it be a reasonable assumption that a wood
19 frame shelter without a basement has a document reduction
20 factor for ground shine of approximately .5 or .6?

21 A (Keller) Those numbers are commonly used. That's
22 within the realm of numbers which are quite commonly used.
23 However, it was the State of New Hampshire that selected the
24 .9.

25 Wood frame houses, there is generally a number given,

1 a range given also. It's been my experience that the .9
2 shelter factors for cloud shine would be associated with a
3 number more like .7 for ground shine.

4 Q Okay.

5 A (Keller) I mean these kind of go together. And the
6 .5 is on the better end of the scale for ground shine dose, and
7 the .9 is clearly is on the poorer end of the scale for cloud
8 shine dose.

9 So I would be -- those numbers are possible, but I
10 would think that the ground shine component would be somewhat
11 less effective than the .5 would indicate. But those numbers
12 are published numbers in a range for wood frame houses, yes.

13 Q Assume that in the event of a serious accident that
14 does involve a ground shine component that a person is
15 sheltered in a wood frame shelter in the beach area.

16 Isn't it correct that that person would receive less
17 ground shine dose than he or she would receive if he were
18 sitting in a stationary automobile next to that shelter for the
19 same period of time?

20 A (Keller) I don't remember the ground shine dose
21 factors for an automobile. There are ground shine doses. I
22 mean, we assume that the shelter factor for cars, automobiles,
23 from the cloud shine is 1; essentially no protection. But
24 there is a number which should be ascribed to the ground shine
25 dose component. And to be perfectly frank at this point in

1 time, I just don't recall that number. I thought I had the
2 document with me, but I -- pardon me. If you will give me a
3 second.

4 Q Sure.

5 JUDGE SMITH: Is it as much as a house?

6 THE WITNESS: (Keller) Depending on the house. I
7 mean some houses are better than others.

8 Cars on the road. Okay, the house is -- it's roughly
9 the same order of magnitude. It's not a great deal difference.
10 They are both clearly -- the ranges overlap.

11 MS. SNEIDER: Okay.

12 THE WITNESS: (Keller) And by the way, the document
13 that I looked at is a Sandia report, SAND-77-1725, authored by
14 Aldrich, Ericson and Johnson, and I think this the one that's
15 referenced in NUREG-0654.

16 MS. SNEIDER: I believe that document's in evidence,
17 Your Honor.

18 BY MS. SNEIDER:

19 Q Now if the car were sitting under the plume and
20 radioactive material was deposited, the radioactive material
21 would also deposit on the car; isn't that true?

22 A (Keller) That's correct.

23 Well, on the assumption that the plume was the type
24 of plume that had material which tends to deposit. We already
25 established that some plumes do not have a depositing

1 component, but on the assumption that this accident you're
2 talking about now has a depositing plume, yes, they would
3 deposit on the car.

4 Q Okay. And if the windows to the car were open during
5 plume passage, the radioactive material might also deposit on
6 the person sitting in the car; is that correct?

7 A (Keller) That's quite possible.

8 Q And the conclusions in your testimony relative to the
9 sheltering and evacuation doses do not in any way take into
10 account the doses a person sitting in a car during plume
11 passage might receive from the car or from radioactive material
12 deposited on their skin; is that right?

13 A (Keller) I can't accept all of it as I heard it.
14 What is in the testimony is a generic view that basically the
15 ground shine component for most of the core melt sequence
16 accidents is far and away the largest component of the various
17 components of dose.

18 And that the avoidance of the ground shine dose,
19 because it is by far the major component, not just a little
20 larger, is the way to most efficiently save dose. And in that
21 analysis it is even acceptable to evacuate people through the
22 plume in order to avoid the ground shine dose.

23 So that you are accepting, if you will, the
24 possibility that the cloud shine immersion and/or inhalation
25 dose will be delivered to the individual, but you are avoiding

1 a larger dose component from the ground shine, and therefore
2 the net overall is a dose savings. And that's what's
3 premised -- that's the premise of the testimony.

4 Now, have we done any calculations having to do with
5 times and relative fractions, et cetera?

6 We have not done that. And I am absolutely sure that
7 given enough time I could construct a scenario that had a
8 ground shine component in it, and had an immersion component,
9 and a cloud shine, and an inhalation component, and I could
10 construct a scenario whereby the dose would be less for an
11 evacuation -- I mean, I'm sorry -- shelter first, then
12 evacuation, than the testimony.

13 But for the majority of the cases of severe accident
14 sequences, the indications are that the converse is true. The
15 ground shine dose is going to be the major component if you
16 don't do anything. And therefore in order to get maximum dose
17 savings, the best thing to do is evacuate immediately.

18 Q Even if that means people would get ground shine dose
19 from their skin?

20 A (Keller) Even if it means that people would possibly
21 be contaminated during the evacuation process is what you're
22 talking about. And, yes, that's right.

23 Q And do you know if any analysis was done specifically
24 of people evacuating with windows open through the plume?

25 A (Keller) Not specifically, but that is part -- I

1 mean there is an assumption that people could keep their
2 windows closed for at least portions of the time. And we now
3 have to get into a discussion of how long does the plume stay
4 where the people are, or how long do the people stay where the
5 plume is.

6 And we now get into a meteorological discussion which
7 I read the Board's discussion. I didn't think they wanted to
8 hear anymore about that. I believe Judge Smith said something
9 along those lines. And I hesitate to venture into that path.

10 JUDGE SMITH: About meteorology?

11 THE WITNESS: (Keller) Yes.

12 JUDGE SMITH: Well, never do we wish to, but we get
13 paid to listen to things such as that.

14 THE WITNESS: (Keller) Well, it seemed to me I heard
15 a discussion where you said you didn't want to hear anymore of
16 that, so I hesitate to go into that.

17 JUDGE SMITH: But before you go on, the answer to
18 your last question was that he can construct scenarios in which
19 shelter first would be the greatest dose reduction.

20 MS. SNEIDER: Right.

21 JUDGE SMITH: And now what are you testing him on?
22 But he's saying for the majority of the accidents, that would
23 not be the case. Now what is it that you are testing him on
24 now?

25 MS. SNEIDER: Well, when he says a majority of the

1 accidents, that would not be the case. I wanted --

2 JUDGE SMITH: All right, is it your premise that that
3 is incorrect? I mean, is that what you're testing him on?

4 MS. SNEIDER: For the majority of the severe
5 accidents, yes, that's my -- that it is incorrect.

6 JUDGE SMITH: All right.

7 THE WITNESS: (Keller) I'm not sure there's a
8 question pending.

9 JUDGE SMITH: I just --

10 MS. SNEIDER: No, I was responding to the Judge.

11 THE WITNESS: (Keller) Oh.

12 BY MS. SNEIDER:

13 Q I believe you stated in part in response to this
14 question that your evaluation was a generic evaluation, and if
15 not, you've stated that before. And it's true then you did
16 not consider, in reaching your conclusion, the fact that cars
17 could be in the beach area immobile for many hours during plume
18 travel; is that correct?

19 A (Keller) That is correct. This then leads
20 immediately to the next question. How long is the car in the
21 plume, or conversely, how long does the plume stay where the
22 car is. And that gets us right into the meteorological
23 discussion.

24 Q Which you're not addressing, I take it.

25 A (Keller) I'm trying to answer your questions as

1 truthfully as I can.

2 MR. FLYNN: On instructions from counsel, he's not
3 addressing that.

4 MR. DIGNAN: Why not?

5 MR. FLYNN: Why not?

6 Because it seems to me that opens the door for the
7 reintroduction of the Sholly-Beyea testimony, that's why.

8 MR. DIGNAN: That's a good reason.

9 I missed the door, I guess.

10 (Laughter.)

11 MS. SNEIDER: Actually I can't pass this up. I never
12 intended it, but I have one meteorology question.

13 (Laughter.)

14 MR. FLYNN: And I'll have an objection, but go ahead.

15 MS. SNEIDER: You can object. I just have to ask.

16 BY MS. SNEIDER:

17 Q Would you agree that the plume could stay in the
18 beach area for -- let's see -- considerable length of time
19 assuming the phenomena of sea breezes meeting onshore winds
20 which tend to circulate the plume over the beach area, and
21 recirculate it?

22 MR. FLYNN: Objection. Your Honor, this is precisely
23 the subject of the Sholly-Beyea testimony which has been
24 excluded at least twice that I recall.

25 MS. SNEIDER: Sholly -- I think we've gone through

1 this before. Sholly-Beyea didn't mention sea breeze and wind,
2 but the subject of meteorology has come up in the RAC comments,
3 in Bores 2. I think it's gone into -- it's been gone into this
4 before. I never intended to get into meteorology except that
5 the witness did leave an inference that I felt necessary to
6 rebut, at least in part.

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7 (Continued on next page.)

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1 MR. FLYNN: Your Honor, she's better off if he
2 doesn't answer it, because the way it's left now the common
3 sense answer to the question in, yes, the plume could be on the
4 beach for an indefinite period of time.

5 MR. DIGNAN: That's the common sense answer, I don't
6 believe that for a minute. So let's let him answer.

7 JUDGE SMITH: Do you want both?

8 MR. DIGNAN: A flutter of hands will do.

9 (Laughter)

10 THE WITNESS: (Keller) But we have to be leaving.

11 MR. FLYNN: Do you understand my concern about
12 introducing site-specific --

13 JUDGE SMITH: Well, we have had testimony about the
14 breezes in and out. But the purpose of her's now is to
15 postulate a situation where there is a very, very large amount
16 of dose on the beach for an extended period of time. And
17 that's your concern is that, here we're getting into specific
18 dose consequence scenarios.

19 MR. FLYNN: If that's the only question, could -- is
20 it possible that "X," whatever it is.

21 MR. DIGNAN: Oh, no. Is it possible. Your Honor,
22 they tell me that technically competent people can give me the
23 odds that two Boeing 747s, full of fuel, will crash in mid air
24 over and fall into Patriot Stadium down in Foxboro on the day
25 of the Superbowl, and it's long odds given the Patriot's

1 propensity for not getting into the Superbowl. But there are
2 some odds.

3 Now, on that basis I suppose one could argue, we
4 should pass along to the Commonwealth we don't have football
5 stadiums. I mean, is this what we're doing. We're pushing --
6 I have admitted from the start of this case that you can what
7 if anything technologically to death including nuclear
8 powerplants. And that's what I think we're doing here.

9 JUDGE SMITH: I don't know what's she's doing.

10 MS. SNEIDER: If the witness won't -- if we could
11 agree to strike the reference to meteorology, I will be happy
12 to withdraw the question.

13 JUDGE SMITH: There's nothing

14 MR. FLYNN: Good, I accept.

15 JUDGE SMITH: Okay. That's a good arrangement.

16 MS. SNEIDER: Okay.

17 BY MS. SNEIDER:

18 Q Mr. Keller, your testimony essentially concludes that
19 sheltering followed by evacuation is a poor option because the
20 ground shine dose a person could receive while evacuating in
21 addition to the dose he or she might receive sheltering -- I
22 missed something here -- because of the cumulative doses from
23 those two factors; is that correct?

24 A (Keller) Could you cite where you're reading from,
25 please?

1 Q I was trying to summarize. I could give you a cite.
2 But it's my understanding it's because of the accumulation of
3 the dose from sheltering and then from --

4 A (Keller) It's the total dose that we're talking
5 about, not a dose from any one component of the mixture of dose
6 components.

7 Q But it's the ground shine component you're most
8 concerned with, the ground shine component during evacuation;
9 is that right?

10 A (Keller) Well, there is ground shine component while
11 the people would be sheltered. There is ground shine component
12 after the plume has gone away, the emergency in the plant has
13 subsided, the plant is -- maybe not -- it's stable, it's not
14 going to continue to have offsite releases consequences. You
15 have to get the people out of these shelters. The ground is
16 contaminated. You have to take these people across this
17 contaminated ground. And that is going -- they're going to
18 incur additional dose during this transit.

19 And the argument is that that summation of what they
20 got while they were in the shelters, either while the plume
21 passed or from the ground shine after it passed, that total is
22 much -- is likely to be much greater than if they had moved
23 immediately upon notification.

24 Q But your testimony did not consider in any way, did
25 it, the possibility that the beach -- that if the beach

1 population were instructed to shelter during plume passage,
2 that they could thereafter be instructed to evacuate along
3 routes that would avoid radioactive hot spots?

4 A (Keller) Would you define hot spots for me. I don't
5 know what you mean by hot spots.

6 Q Places of ground shine contamination, and especially,
7 large amounts of ground shine contamination?

8 A (Keller) But we've already established that if a --
9 if the accident is of a type which has depositing radioactive
10 material in it, that the cars and the surfaces would be
11 contaminated and therefore would have a ground shine component.

12 Q They would have that whether the people are sheltered
13 or whether the people are evacuated?

14 A (Keller) That's correct. I'm having trouble -- I
15 would like to answer your question, but I don't know what you
16 mean by hot spots.

17 Q Well, let's use this hypothetical. Assume people are
18 instructed to shelter in the beach area and in this case the
19 plume does not pass over the beach, instead it travels in a
20 northwesterly direction from the plant and intersects a major
21 evacuation route; couldn't -- wouldn't it be better if the
22 beach population was instructed to shelter pending the plume
23 passage, and then instructed to evacuate southward so as to
24 avoid any ground shine component?

25 A (Keller) That is a possibility.

1 Q And this time even -- I'd like to ask you, assuming
2 that the plume did pass through the beach area while people are
3 sheltered, couldn't -- but still the plume is traveling, I
4 guess, in a northeasterly direction; couldn't the population
5 thereafter be instructed to evacuate southward so as to avoid
6 any further ground shine contamination?

7 A (Keller) It is my understanding that 'he -- based on
8 reading the transcripts of what has gone on here, not based on
9 review of the plan -- that the State of New Hampshire has the
10 capability to modify EBS messages to fit the needs at the time.

11 Where I'm having a problem, and to your hypothetical
12 the answer is, yes. My problem is that, in the event of a
13 severe accident sequence, the uncertainty of what is going to
14 occur, prior to it occurring, is so great that the planning
15 basis, notwithstanding the fact that you may plan to do
16 something and any given circumstance because of other outside
17 influences, you may not do what you planned to do.

18 But because of the uncertainties associated with,
19 which way is the wind going to be blowing when the release
20 starts? Will I have a sea breeze effect? Will I have
21 recirculation? How long will the plume last? I mean, how long
22 will the duration of release be? When will it start?

23 All of those uncertainties, which are very large,
24 much larger than the protection that you would get from
25 sheltering, the 10 percent from the cloud shine or the 50

1 percent from ground shine.

2 All of those uncertainties make it prudent to make
3 the decision for the areas close to the plant two, perhaps
4 three miles in that range, that kind of distance, basically
5 automatically, if you get into a core melt sequence, the best
6 thing to do is to evacuate those people immediately without
7 regard to the ETE.

8 It may turn out that the accident didn't progress
9 that far or it may turn out that there was a minor release of
10 activity at which point you would say, I wish I had sheltered
11 those people, because that would have been enough.

12 But because of the uncertainty, and no way to
13 reasonably project what is likely to occur in the future. And
14 because of the fact that we now recognize or most people
15 recognize that in the end of the spectrum there are some
16 accidents, which if they occur, could result in early health
17 effects. And that primarily comes from the ground shine
18 component.

19 That you're better off to do the best that you can to
20 reduce that ground shine component. And as I stated earlier,
21 15 minutes ago, I can generate a scenario, probably more than
22 one --

23 Q Well, we've just generated several, haven't we?

24 A (Keller) That's right. I mean --

25 MR. FLYNN: May the witness be permitted to answer

1 the question.

2 THE WITNESS: (Keller) There are scenarios which can
3 be synthesized, right, which would indicate that, yes, this
4 other might be a better choice.

5 The problem is that, this is all secondguessing,
6 here's a hypothetical. Under this hypothetical, would it not
7 be better to do something else; and the answer is, yes, it
8 would be better to do something else.

9 In a real event, these are very complex machines run
10 by a lot of people. If you ever get into a core melt sequence
11 many, many things have gone wrong. Some of those things can be
12 mechanical. There could be perhaps human error. But lots of
13 things have had to have break, go wrong, however you want to
14 use it, in order to get to that point.

15 You have very little confidence that you can predict
16 with any reliability what the next step is going to be. So the
17 prudent thing to do is, because of the fact that if it does go
18 as badly as it can go, basically, is to move the people in a
19 360-degree arc, a radius, within two or two and a half, three
20 miles, and that's going to be determined more by geopolitical
21 boundaries or areas that can be recognized by the people you're
22 trying to move rather than a fixed mileage. The best thing to
23 do is to move those people. And you either move them either
24 prior to the start of the release or immediately after the
25 release. And that's the thrust of the testimony, and that's

1 why.

2 We never said and never -- I never said, that there
3 are not some accidents which it might not be better after the
4 fact, if you knew for sure what was going to happen in the
5 accident to say, shelter first, and leave later.

6 BY MS. SNEIDER:

7 Q Well, let me ask you this, if you can't move the
8 people prior to the start of the release because there isn't
9 enough warning, might you then be better because you don't know
10 where the plume is going to travel to put them in shelters, and
11 wait and then evacuate them in order to avoid this ground shine
12 component to the greatest extent possible?

13 A (Keller) If the State of New Hampshire had come in
14 with a recommendation or an assertion, all right, because we
15 didn't verify any of this, that they had -- that the shelters,
16 average shelter in the vicinity we're talking about, had a
17 shelter factor of .5 or .4, all right. My own personal opinion
18 is, you might have looked at it a little harder.

19 The State came in that said, the average shelter
20 factor in this -- of the buildings out here, is about .9 -- a
21 10 percent reduction. That's not enough -- I mean, when you
22 have uncertainties in source terms and you have uncertainties
23 in weather conditions, you have uncertainties in the nuclide
24 mix that's likely to be there, this 10 percent reduction is
25 so -- is down in the dirt in the error band, it's trivial.

1 And it basically is, we don't have much in the way
2 of shelter. And particularly in that case, although this is a
3 generic approach, not just for Shor- -- Seabrook, sorry, not
4 just for Seabrook. If you get into core melt sequences, the
5 most appropriate thing to do is to evacuate in a two mile
6 circular, roughly two mile circular, period. And you don't do
7 a calculation. You do not take out a long sheet of paper and
8 fill in a bunch of numbers.

9 Q I understand.

10 A (Keller) Because I submit that most of the numbers
11 that you have to put on that paper you will not know with any
12 degree of reliability.

13 JUDGE SMITH: How much more do you have to go?

14 MS. SNEIDER: Four questions. I think I can get
15 quick responses, I'm hoping.

16 THE WITNESS: (Keller) Go for short answers.

17 JUDGE SMITH: Do you notice we're packing our bags
18 here.

19 (Laughter)

20 MS. SNEIDER: I'm packing, too.

21 THE WITNESS: (Keller) That's a signal.

22 BY MS. SNEIDER:

23 Q You agree, don't you, that for a major severe release
24 -- strike that. You agree, wouldn't you, that a major severe
25 release would be very intense initially with the major portion

1 of the radioactive material released one half hour to two hours
2 after the start of the release?

3 A (Keller) Disagree. We went over that with Ms.
4 Weiss, and I will again read page 17 of 0654, if you'd like,
5 but our guidance, which is what we use to evaluate plans and
6 adequacy says, "Time at which major release may occur, .5 hours
7 to one day.

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8 Q I believe Ms. Weiss was talking about warning times
9 from the onset of accident conditions to a release?

10 A (Keller) No. She had the time at which a major
11 release may occur, and this is on page 17 of 0654 in table 2.

12 Q I'm talking about the time in which the major portion
13 of the radioactive material would be released?

14 A (Keller) Let me quote for you again and I'll try it
15 a little slower. This is the third entry in the table on table
16 2: "Time at which major portion of release may occur, .5 hours
17 to one day after start of release." And therefore I disagree,
18 strongly, with the two hour end of your window. I'll buy on
19 the lower end, but many of the accidents the major portion of
20 release is one day.

21 Q We're talking about severe accidents?

22 A (Keller) This is --

23 Q Okay.

24 A (Keller) -- the guidance.

25 Q Do you recall agreeing with that statement in your

1 deposition?

2 A (Keller) I think, and I may be wrong, if I did agree
3 with it I was wrong. Okay. I think what I was agreeing with,
4 my recollection is that, in order to have serious health --
5 early health effects that the release had to start, had to be a
6 -- had to start fairly quickly. And that's what I think I
7 agreed to.

8 But the guidance that we have, standard guidance as
9 has been used, says one day. And if I said that in the
10 deposition I was wrong and I apologize.

11 Q You have no evidence, do you, that in the event of a
12 fast-breaking serious accident at Seabrook that the majority of
13 beachgoers would not be immobile in cars in the beach area
14 during the entire duration of the plume passage?

15 A (Keller) I'm sorry, there were at least four
16 negatives in there, I think. Could you -- I --

17 Q I believe it's two.

18 A (Keller) Only two, okay. But it sounded like more
19 than that. I have no evidence -- please try again, I'm sorry.

20 Q I asked if you had --

21 A (Keller) Any evidence.

22 Q I said, you have no evidence, do you, that in the
23 event of a fast-breaking serious accident at Seabrook that the
24 majority of beachgoers would not be immobile in cars in the
25 beach area during the entire duration of the plume passage?

1 MR. DIGNAN: I object. And I object because what if
2 the accident, for example, the wind was all blowing away from
3 the beach, bingo, the plume went the other way. This is the
4 problem, Your Honor.

5 JUDGE SMITH: It still stands there. They're sitting
6 in their car but the plume --

7 MS. SNEIDER: Well, then the plume passage --

8 JUDGE SMITH: -- is going the other way.

9 MR. DIGNAN: Yes.

10 JUDGE SMITH: Well --

11 MR. DIGNAN: So they wouldn't be on the beach through
12 the entire plume passage.

13 JUDGE SMITH: Well, they will be on the beach --

14 MR. DIGNAN: Because they wouldn't know.

15 JUDGE SMITH: -- during the entire plume passage, but
16 they're not in the plume passage.

17 MR. DIGNAN: There's no plume passing the beach,
18 that's my point.

19 JUDGE SMITH: She didn't ask that.

20 MR. FLYNN: I also object --

21 MR. DIGNAN: This is the problem with the no
22 parameter --

23 JUDGE SMITH: I know.

24 MR. DIGNAN: -- hypothetical stuff.

25 MS. SNEIDER: I just --

1 MR. DIGNAN: And you know, we just got a real
2 education when the witness pointed out that all of these
3 questions are assuming, you know all these things in advance
4 and you don't. I really think --

5 JUDGE SMITH: Well, he made that clear. But she's
6 making her case.

7 MR. FLYNN: I have a different objection.

8 JUDGE SMITH: But there's infirmities with the
9 question, I agree with you.

10 MR. DIGNAN: I indicated the time, she says it's the
11 next to the last question, the witness looks happy, I subside.

12 JUDGE SMITH: The answer to the question will be as
13 good as the question.

14 (Laughter)

15 MR. DIGNAN: Hopefully it will be better than the
16 question.

17 MR. FLYNN: I'd just like to point out that this
18 witness has not been offered as an expert in either human
19 behavior or traffic management.

20 MS. SNEIDER: This question does not go to human
21 behavior or I fail to see it.

22 JUDGE SMITH: Do you understand the question?

23 THE WITNESS: (Keller) No. You know, I -- I'm
24 sorry, I will try very hard.

25 MR. FLYNN: The question -- she's basically asking

1 you if you agree that it's possible that people may be
2 immobile, in cars during the entire time of a plume passage?

3 THE WITNESS: (Keller) There are some accident
4 sequences, as I understand them, and as I understand what I
5 have read in the transcript about the evacuation time estimate
6 for the last car out of the beach areas. That, yes, there are
7 some sequences where the last car out will not be out prior to
8 the end of the duration of the release.

9 On the other hand, there are accident sequences where
10 they will all be out before the end of the duration of the
11 release, as I understand the evacuation time estimates over
12 approximately six and a half hours for the last car out.

13 MS. SNEIDER: Okay. That was not responsive to the
14 question.

15 THE WITNESS: (Keller) Sorry.

16 BY MS. SNEIDER:

17 Q The question went --

18 JUDGE SMITH: List all of that -- list all of the
19 conditions of the question instead of this, you have no
20 evidence that. Just assume this, assume that, assume this.

21 MS. SNEIDER: Assume a fast-breaking serious accident
22 at Seabrook, I'm asking him if he has any evidence that the
23 majority of the beachgoers would not be immobile in cars, in
24 the beach area during the entire duration of the plume passage?

25 JUDGE SMITH: Do you have any evidence?

1 THE WITNESS: (Keller) I don't have any evidence,
2 the majority will or won't.

3 JUDGE SMITH: Okay, so he answered the question.

4 MS. SNEIDER: Okay.

5 BY MS. SNEIDER:

6 Q Is it your conclusion that the immediate evacuation
7 strategy is the preferred protective action for the beach
8 population dependent in large part on the analysis of NUREG-
9 1062?

10 MR. DIGNAN: That's a cousin to 1210 or something,
11 we're going to be here for the rest of the night.

12 THE WITNESS: (Keller) Clearly, NUREG-1062 tabulates
13 this kind of analysis. But the analysis is not unique. So in
14 that regard, yes, it's similar to things in 1062, but it's not
15 unique to what's in 1062. But that's, to my way of thinking or
16 to my knowledge, the most concise place where all this is put
17 down.

18 BY MS. SNEIDER:

19 Q And NUREG-1062 is essentially a generic dose
20 consequence analysis; is that right?

21 A (Keller) That's my understanding, yes.

22 MS. SNEIDER: Okay. I'm finished.

23 JUDGE SMITH: Any further questions by Intervenors?

24 (No response)

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(Massachusetts Attorney General
cross-examination plan for
Joseph Keller follows:)

MASSACHUSETTS ATTORNEY GENERAL
CROSS-EXAMINATION PLAN FOR
JOSEPH KELLER

Cross-examination on conclusion in testimony that, "In those cases (of severe accident dequences), if the dose reduction strategy is sheltering first followed by an evacuation after plume passage, the total dose would not be as great as that for the immdiate evacuation strategy," by:

- (a) Comparing cloudshine, inhalation, and groundshine doses that a person would receive in a shelter in the beach area to the doses he/she would receive ~~in a shelter in the beach area~~ ~~in a car next to that shelter during plume passage~~ if in a car next to that shelter during plume passage.
- (b) Agreement that a benefit of sheltering is that population can be directed to evacuate afterwards in a direction that would avoid radioactive hot spots.

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1 JUDGE SMITH: Mr. Flynn.

2 MR. FLYNN: Yes, I --

3 JUDGE SMITH: I left you to the very end. Let's see
4 if anybody else has any questions.

5 MR. HUNTINGTON: No questions, Your Honor.

6 JUDGE SMITH: None.

7 All right, Mr. Flynn.

8 Mr. Reis, did you have some?

9 MR. REIS: Yes, I do. One for Mr. Cumming.

10 CROSS-EXAMINATION

11 BY MR. REIS:

12 Q On the last sentence in your conclusion you testified
13 that you were talking about implementing detail for general
14 beach populations.

15 How does that contrast with the need for, and is
16 there a need for implementing detail for portions of the beach
17 populations?

18 A (Cumming) Based on my review of the transcripts,
19 there is implementing detail now for transit-dependent
20 transients, to some degree.

21 If the plan -- if my understanding of the transcript
22 is correct, and the plan calls for sheltering the 98, the so-
23 called 98 percent, that would be a different factor.

24 I think what's very important for everyone in this
25 room to understand is that Mr. Keller's testimony represents

1 the fact that FEMA believes, and it's our position in this
2 testimony that sheltering is an extremely, extremely limited
3 option.

4 And for decisionmakers to be able to use that option,
5 they've got to know exactly what they're doing, or people could
6 be hurt, particularly in the two to three-mile inner ring. And
7 the problem -- and one of the problems we've had all along is
8 that there have been people, other people in FEMA who have felt
9 that sheltering was somehow a much greater option than FEMA now
10 believes it really it, and that is the import of our testimony.

11 MR. REIS: Thank you.

12 JUDGE SMITH: Mr. Flynn?

13 MR. FLYNN: Yes.

14 REDIRECT EXAMINATION

15 BY MR. FLYNN:

16 Q Mr. Cumming, in that precise regard, you testified in
17 response to a question from Ms. Weiss that you -- that you
18 would expect to see implementing detail for the 98 percent of
19 the population for whom sheltering is an option under limited
20 circumstances.

21 My question is, does the absence of that implementing
22 detail in the present plan and in the February submission from
23 the State of New Hampshire mean that the plan is inadequate
24 with respect to J-9 and J-10-M with regard to the beach
25 population?

1 A (Cumming) In my judgment, the plan, through the
2 February transmissions, called for originally ad hoc --
3 so-called ad hoc or sheltering in place for the 98 percent.

4 In my judgment, that was adequate.

5 Q Thank you.

6 Mr. Keller, you were asked a fairly long series of
7 questions about the different components of a release and
8 focusing principally on cloud shine and ground shine.

9 My question is, in general, what is the difference in
10 duration of the cloud shine component vic-a-vis the ground
11 shine component?

12 A (Keller) Ms. Sneider asked a question along those
13 lines.

14 The cloud shine component will be present only when
15 the receptor is in the vicinity of the passing plume. Once the
16 plume has either blown on through the area or the wind has
17 shifted away to the other direction, that individual -- an
18 individual at a given point will not be impacted by the cloud
19 shine dose.

20 The ground shine dose, on the other hand, is
21 controlled once it is deposited on the ground only by the
22 radioactive half-life of the nuclides in the mixture which is
23 deposited, and the amount of time that the individual stays
24 there.

25 Q Well, for how long a time would the ground shine be a

1 matter of concern?

2 A (Keller) It depends strictly on the amount of -- the
3 nature of the radioactive material which is released.

4 However, in a severe core melt sequence accident at
5 the heavy end of the spectrum, if you will, there is, according
6 to WASH-1400, the potential to release 30 to 40 percent of the
7 cesium dose, of cesium which is present in the core.

8 Cesium has a 30-year half-life. So that this ground
9 shine component would last a long time.

10 Q You answered in response to a question put to you by
11 Ms. Sneider that there is a possibility of a release that had
12 no ground shine component.

13 Given that, does that change your conclusion about
14 the preferability of evacuation as a protective action?

15 A (Keller) It would not, for the reason that I went
16 through in the fairly long answer that I gave, because I don't
17 know ahead of time that the accident is going to stop with a
18 noble gas release only. And if I knew that, and absolutely was
19 sure of that, number one, it probably wouldn't be a core melt
20 sequence and we would not be at general emergency, because if
21 you read the definition of general emergency in 0654, it says
22 either imminent or actual core damage.

23 So if I knew all of those things ahead of times, then
24 I might have a different answer. But the situation is you just
25 don't know what's going to happen. And because of the fact

1 that you can have in core melt sequences immediate health
2 effects, it's prudent to take the protective action which gives
3 you the maximum protection against the biggest problem, and
4 that's immediate evacuation.

5 MR. FLYNN: Thank you. I have no other questions.

6 JUDGE SMITH: Anything further?

7 MR. OLESKEY: Yes. Not for the panel.

8 JUDGE SMITH: Oh, okay.

9 You may step down. Thank you, gentlemen.

10 (The witnesses were thereupon excused.)

11 JUDGE SMITH: Mr. Oleskey.

12 MR. OLESKEY: Yes. You had asked Mr. Dignan and I to
13 collaborate and put together a shorter version of Mass. AG
14 Exhibit 48, which we have now done. I'd like to offer the
15 shorter version, and give the reporter the three copies, and
16 have this version accepted in place of the former exhibit.

17 JUDGE SMITH: All right. No objections. The short
18 version of Mass. AG 48 is received.

19 (The document referred to,
20 having been previously marked
21 for identification as
22 Massachusetts Attorney General's
23 Exhibit No. 48 was received
24 in evidence.)

25 JUDGE SMITH: Anything further?

1 MS. WEISS: Mr. Chairman, I had a cross-examination
2 plan which I neglected to give you. I could supply it now to
3 the reporter, or we could --

4 MR. DIGNAN: No, you don't have to. You can --

5 MS. WEISS: -- heave it in the can; whatever your
6 wish is.

7 JUDGE SMITH: If we didn't get it, you don't have to
8 provide it.

9 MS. WEISS: Okay.

10 MR. REIS: Mr. Chairman, I'd like to bring up one
11 other matter.

12 As you know, Mr. Turk has some unfortunate situations
13 at home. I will not be in the office next week, and I am not
14 sure if he would.

15 If it would not impact upon your preparing of
16 findings, I would like another week to submit the Staff's
17 findings. If it would, we will do our best, but I don't know
18 whether we can.

19 JUDGE SMITH: He's now required to have them in by
20 Friday.

21 MR. REIS: Next Friday, that's right. And I would
22 like another week until, I guess, July 1st.

23 JUDGE SMITH: Granted.

24 MR. REIS: Thank you.

25 JUDGE SMITH: Oh, the record will be closing, and we

1 should set a schedule for another pathetic schedule, a
2 laughable schedule for proposed findings.

3 And what do you propose, Mr. Dignan?

4 MR. DIGNAN: Well, Your Honor, am I correct the
5 regulation normally says it's 40-50-60, if I'm correct?

6 JUDGE SMITH: I would like this time to be quite --

7 MR. DIGNAN: I want to get the regulation, because I
8 want to make a plan.

9 JUDGE SMITH: Okay.

10 MR. DIGNAN: May I have just a moment, please?

11 JUDGE SMITH: Certainly.

12 MR. DIGNAN: I know you're trying --

13 JUDGE SMITH: No, I'm not trying to hurry. I want to
14 make an observation on the findings.

15 MR. DIGNAN: .754. The 30-40-50, and then five days
16 for reply from the Applicant is set in the regulations unless
17 the Board otherwise orders.

18 I don't want to shorten anybody's time to have a run
19 at mine, but I'm willing to take a severe shortening of my own.
20 I would be prepared, and suggest that I be required to file my
21 findings by July 1st, and then I don't want to ruin anybody's
22 July 4th weekend, so run it after the 4th. And then the other
23 parties would be 10 days after that, and the Staff 10 days
24 after that.

25 JUDGE SMITH: Did you shorten theirs?

1 MR. OLESKEY: I thought he said he wasn't going to
2 shorten ours.

3 MR. DIGNAN: I'm not going to shorten theirs in terms
4 of the time differential between when I file and they file.

5 JUDGE SMITH: In the differential.

6 MR. DIGNAN: Yes. In other words, it's always seeme-
7 to me that the theory -- let me, and then I can get blown out
8 of the water, whatever you want.

9 The regulation, to me, has always meant the reason
10 the Applicant gets that original 30 days is because the
11 Applicant must -- or the party with the burden of proof, as
12 they say, must come in with findings on every aspect. Those
13 become the target as Your Honor has indicated.

14 For instance, when it's major case where you're
15 filing everything, you've done all the procedural background
16 and so forth, and the theory was that that party needs 30 days
17 to get a pack, a big package together.

18 And the important thing for the other parties is to
19 have at least 10 days to take a run at that. And it's always
20 been my view at least that if I would take a shortening of
21 time, then we can shorten the whole process.

22 There's nothing magic to giving the Intervenors 40
23 days. It seems to me if I come in 10, they should be able to
24 come to 20, or if you want to argue with me, 25.

25 JUDGE SMITH: That would be fine in a typical case

1 where they are just attacking your case in chief, but they have
2 their very own very large case in chief. And so the --

3 MR. DIGNAN: All right, then --

4 JUDGE SMITH: -- 40 days for them is a --

5 MR. DIGNAN: Well, wait a minute, Your Honor.

6 The other point I want to make to you is all we're
7 talking about is a very -- a -- well, I don't mean this
8 pejoratively -- a small part of this case. There's 10 major
9 areas of the case on which proposed findings are filed. I
10 don't see why we need to go 30-40-50 on this one aspect of the
11 case.

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12 MR. OLESKEY: We have a ton of work, all the
13 intervenors. We don't have this on computer in a form that we
14 can spit it out as I think the Applicants do. It's going to be
15 the summertime and our situation breaks down. The
16 secretaries -- Ms. Keough is out for eight weeks now, so her
17 work is going to have to be assumed by somebody else. We would
18 like the time the regulations give us.

19 JUDGE SMITH: Well, this case --

20 MR. DIGNAN: The Attorney General's office has more
21 lawyers working on this case than I do. More.

22 JUDGE SMITH: Mr. Dignan, this aspect of the case,
23 the shel'ving aspect of the case has been at least as long as
24 many operating licensing cases in itself. It's been a big
25 case. And I don't --

1 MR. DIGNAN: That's true, and that's frightening.

2 JUDGE SMITH: And I don't think the Board has any
3 basis to take away from the Intervenors what the regulation
4 anticipated.

5 MR. DIGNAN: Well, then, let's go 30-40-50.

6 JUDGE SMITH: I think we should.

7 MR. DIGNAN: All right.

8 JUDGE SMITH: Is that satisfactory to everybody?

9 Follow the regulations --

10 MR. DIGNAN: Your Honor, could I be --

11 JUDGE SMITH: -- beginning --

12 MR. DIGNAN: Today.

13 JUDGE SMITH: Huh? Tomorrow will be day number one.

14 MR. DIGNAN: All right.

15 Your Honor, could I be --

16 JUDGE SMITH: Tomorrow, or today will be the day in
17 which the record closes and time starts counting according to
18 rules.

19 Does everybody understand that? Any protests?

20 (No response.)

21 JUDGE SMITH: Okay.

22 MR. DIGNAN: Has the Board given any further thought
23 as to whether it is planning to issue a decision that will deal
24 with the matters already tried, or I assume now with the staff
25 coming in now, the idea is to issue a decision that will pick

1 up sheltering as well as the other matters we have tried; is
2 that right?

3 JUDGE SMITH: Well, I suspect that there's a good
4 chance that we will -- that everything will fall in and we'll
5 come out with one decision.

6 Our highest priority is get these contentions in, get
7 discovery going on the Massachusetts plan. Once discovery
8 starts, I'm removing my telephone, and we'll work on those.

9 MR. DIGNAN: That was my next question. Is it the
10 Board's at least present intention -- I understand the Board --
11 to issue a partial initial decision that will deal with only
12 the New Hampshire aspect of the case?

13 JUDGE SMITH: I'm sorry, I thought that was your
14 question, earlier question.

15 MR. DIGNAN: No, my earlier --

16 JUDGE SMITH: What was your earlier question?

17 MR. DIGNAN: My earlier question was a little finer
18 than that. I didn't know whether the Board was planning to
19 issue a partial initial decision first on the aspects of the
20 case we've already tried, and at least I have filed proposed
21 findings on, and the Intervenors have.

22 And then treat sheltering in a separate division.

23 JUDGE SMITH: Oh, right.

24 MR. DIGNAN: Or is it the Board's idea that a partial
25 initial decision will issue that will cover the whole New

1 Hampshire plan --

2 JUDGE SMITH: Yes.

3 MR. DIGNAN: -- from front to back?

4 JUDGE SMITH: That's what I would think is the most
5 likely.

6 Certainly if your question implies we'll wait until
7 the Massachusetts plan gets in and have one, no. We certainly
8 will be working on that plan -- that New Hampshire plan and
9 hope to have an initial decision out. It looks most likely
10 that the sheltering track will catch up with the main track as
11 far as our decision is concerned.

12 All right, anything further?

13 MR. DIGNAN: Yes, another matter I'd like to plant in
14 the Board's mind, and no more than that. We're going to have
15 an exercise, as the Board is aware, in two weeks. Presumably
16 that will be litigated as hotly as everything else at Seabrook
17 is litigated.

18 I would like the Board to at least be aware that at
19 some point I may be asking the Board to look at a scheduling
20 concept of trying to fold the exercise litigation into the
21 Massachusetts plan litigation, litigate it all at once in one
22 set of evidentiary hearings.

23 I don't know whether the Board would be amenable to
24 that or not, but I at least would like an opportunity to
25 present that to them. I don't see any sense in presenting it

1 until after the exercise, and we know about where we stand on
2 the thing. But sometimes the exercise removes a lot of the
3 contentions, it would seem to me.

4 In other words, if they've exercised successfully,
5 the problem goes away in everybody's mind. And I think in the
6 long run it may shorten up getting through Seabrook to at some
7 point, possibly told, the exercise situation into the
8 Massachusetts plan situation.

9 I'm not asking for that ruling now.

10 JUDGE SMITH: Okay.

11 MR. DIGNAN: I just want to advise the Board that I
12 may be --

13 JUDGE SMITH: Well, we certainly will entertain your
14 suggestion.

15 Anything further?

16 All right, well, the record is closed on this phase
17 of the hearing, and, again, we want to -- and this isn't pro
18 forma, this is something we've talked about. We want to
19 express our appreciation to the participants here for your
20 civility and your restraint, your cooperation with the Board.
21 It's made what could have been a very, very difficult hearing
22 into a rather satisfying one, and it could have been very bad.
23 And we understand the differences are great, but the
24 professional conduct has been the best that it could be, and
25 we're very grateful for it.

1 We're adjourned.

2 (Whereupon, at 5:36 o'clock p.m., the hearing was
3 concluded.)

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1 CERTIFICATE

2
3 This is to certify that the attached proceedings before the
4 United States Nuclear Regulatory Commission in the matter of:

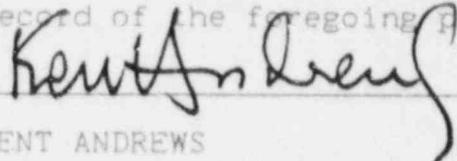
5 Name: PUBLIC SERVICE COMPANY OF
6 NEW HAMPSHIRE, et al.

7 Docket Number: 50-443-OL, 50-444-OL

8 Place: CONCORD, NEW HAMPSHIRE

9 Date: June 16, 1988

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

16 /s/ 

17 (Signature typed): KENT ANDREWS

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