ORIGINAL

## UNITED STATES NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

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: 10594 through 10821

Place: Concord, New Hampshire

Date: May 5, 1988

180/1

## HERITAGE REPORTING CORPORATION

Official Reporters
1220 L Street, N.W., Suite 600
Washington, D.C. 20005
(202) 628-4888

8805120148 880505 PDR ADOCK 05000443 T DCD

Tax50Ttl	2	UNITED STATES NUCL ATOMIC SAFETY AND			MISSION	
		In the Matter of:			)	
	5	PUBLIC SERVICE COM NEW HAMPSHIRE, et			Docket Nos. 50-443-OL 50-444-OL	
	6	ARTHURAN SELECTION	101700 4 411		) OFF-SITE EMERGENCY	
	7	(SEABROOK STATION,			) PLANNING	
	8	EVIDENTIARY HEARIN				
	9			Thursda	av	
	10			May 5,		
•	11			Room 21	10 ative Office Building	
	12				d. New Hampshire	
	13	The abov	e-entitled	matter o	came on for hearing,	
	14	pursuant to notice	, at : ^2 a	m.		
	15	BEFORZ:			TH, CHAIRMAN	
	16			ar Regul	and Licensing Board egulatory Commission C. 20555	
	17		JUDGE JERRY HARI			
	18		Atomic Saf	ety and	nd Licensing Board gulatory Commission	
	19		Washington			
	20				INENBERGER, JR., MEMBER Licensing Board	
	21			ar Regul	latory Commission	
	22		maaritig to:			
	23					
•	24					
	25					

1	APPEARANCES:
2	For the Applicant:
3	THOMAS G. DIGNAN, JR. ESQ. KATHRYN A. SELLECK, ESQ.
4	GEORGE LEWALD, ESQ. Ropes & Gray
5	225 Franklin Street Boston, Massachusetts 02110
6	For the NRC Staff:
7	
8	SHERWIN E. TURK, ESQ. Office of General Counsel U.S. Nuclear Regulatory Commission
9	Washington, D.C. 20555
10	For the Federal Emergency Management Agency:
11	H. JOSEPH FLYNN, ESQ. Federal Emergency Management Agency
12	500 C Street, S.W. Washington, D.C. 20472
13	
14	For the State of New Hampshire:
15	G. DANA BISBEE, ASST. ATTY. GEN. GEOFFREY M. HUNTINGTON, ESQ. State of New Hampshire
18	25 Capitol Street Concord, New Hampshire 03301
17	For the Commonwealth of Massachusetts:
18	
19	JOHN TRAFICONTE, ASST. ATTY. GEN. CAROL SNEIDER, ASST. ATTY. GEN. STEPHEN OLESKEY, ESQ.
20	Commonwealth of Massachusetts One Ashburton Place, 19th Floor
21	Boston, Massachusetts 02108
22	For the New England Coalition against Nuclear Pollution:
2.3	
24	ELLYN R. WEISS, ESQ. Harmon & Weiss
25	2001 S Street, N.W. Washington, D.C. 20009

1	APPEARANCES: (Continued)
2	For the Seacoast Anti-Pollution League:
3	ROBERT BACKUS, ESQ. Backus, Meyer & Solomon
4	116 Lowell Street Manchester, New Hampshire 03105
5	JANE DOUGHTY, DIRECTOR
6	Seacoast Anti-Pollution League 5 Market Street
7	Portsmouth, New Hampshire 03801
8	For the Town of Hampton:
9	MATTHEW T. BROCK, ESQ. Shaines & McEachern
10	25 Maplewood Avenue P.O. Box 360
11	Portsmouth, New Hampshire 03801
12	For the Town of Kensington:
13	SANDRA FOWLER MITCHELL, EMERGENCY PLANNING DIR. Town Hall Kensington, New Hampshire
14	
15	For the Towns of Hampton Falls and North Hampton and South Hampton:
16 17	ROBERT A. BACKUS, ESQ. Backus, Meyer & Solomon
	116 Lowell Street
18	Manchester, New Hampshire 03105
19	For the Town of Amesbury:
20	(No Appearances)
21	
22	
23	
24	
25	

1		IN	DEX			
2	WITNESTES	DIRECT	CROSS	REDIRECT	RECROSS	EXAM
3	Panel: JOHN W. BAER					
4	DONALD W. BELL JOHN D. BONDS					
5	ANTHONY M. CALLENDRELLO PAUL R. FRECHETTE, JR.					
6	JAMES A. MACDONALD RICHARD H. STROME					
7	WILLIAM T. WALLACE, JR. by Ms. Sneider		10599			
8	by Mr. Brock by Ms. Weiss		10683 10706			
9	by Mr. Backus by Ms. Mitchell		10744			
10	by Ms. Sneider by Mr. Turk		10756			
11	by Judge Linenberger		10755		10700	10763
12	by Ms. Sneider by Judge Linenberger				10769	10777
13	Panel: BEVERLY HOLLINGWORTH					
14	THOMAS MOUGHAN JEAN LINCOLN					
15	by Mr. Brock	10786				
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						

1		I_N_D_E_X_	(Continued	12
2	EXHIBITS:	IDENTIFIED	RECEIVED	DESCRIPTION
3	Managabugatta Att	nanov Conorni		
4	Massachusetts Att	orney General	-	
5	No. 14	10620	10623	1 page, Shelter Survey Form, Stone & Webster
6 7 8	No. 15	10621	10623	2 pages, Hampton, New Hampshire Assessor's Property Work Card
9	No. 16	10624	10682	1 page, Shelter Survey Form, Jeanette's Sea Shoppe
11 12 13	No. 17	10626	10682	2 pages, Calculator Cost Form, Tax Assessor's Card, Jeanette's Sea
14				Shoppe
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

25

Q

Good morning.

- 1 On page 13 of your testimony it states, quote: "A
- 2 key provision for initiation of protective actions is prompt
- 3 notification of the public." It also states: "That sirens are
- 4 in place in the beach area to sound an alert signal and to
- 5 broadcast voice message to advise beach population of actions
- 6 they should take." Is that correct?
- 7 A (Callendrello) Again, I think the essence of that is
- 8 correct. I'm not sure I heard all the words that are actually
- 9 in the testimony, on the fact that the messages will be in
- 10 English and French. But the essence of that is correct.
- 11 Q Has the state performed any tests to determine if the
- 12 sirens on the beach when used in the voice mode will be
- 13 intelligible to people all over the beach area?
- 14 A (Strome) The state has not conducted tests of that
- 15 type yet, no.
- 16 Q Has the utility?
- 17 A (Callendrello) Yes.
- 18 Q And did those tests demonstrate that sirens could be
- 19 intelligible all over the beach area?
- 20 A (Callendrello) The tests indicate the range at which
- 21 a certain percentage of the population will find the message
- 22 intelligible. And the criteria that is set is the distance at
- 23 which a certain percentage will find the message intelligible;
- 24 and that percentage is 90 percent. So, I know a distance where
- 25 90 percent of the population would find the message

- 1 intelligible, at least, without any further communication from
- 2 any other information source.
- 3 That distance where 90 percent intelligibility is
- 4 achieved, by the way, does cover the entire beach area.
- 5 Q Did this test take into consideration the sounds from
- 6 the ocean or was it just based on distance in any location?
- 7 A (Callendrello) I don't know the details on what
- 8 level of ambient noise that took into effect. I'm just not
- 9 familiar with the details of the study.
- 10 Q Who is the person at New Hampshire Yankee who's most
- 11 knowledgeable about this study?
- 12 A (Callendrello) My contact, at least in terms of
- 13 getting information regarding the study, is an engineer by the
- 14 name -- or emergency planner by the name of Travis Beard.
- 15 Q Now, with respect to the instructions that might be
- 16 given to the beach population in the event they were told to
- 17 shelter, the EBS messages in the 8/86 version of the New
- 18 Hampshire RERP, Rev. 2 recommended among several measures that,
- 19 quote: "To obtain increased protection from possible exposure
- 20 to radiation people move to a basement, if there was one in
- 21 their building. The latest draft messages regarding sheltering
- 22 have deleted the recommendation to move to basements." Is that
- 23 correct?
- 24 A (Callendrello) I don't have -- I don't think I have
- 25 both versions of that in front of me. I may have the 8/86

- 1 messages and I can at least give you an answer on that one.
- I don't think what you'v stated is correct, but I'd
- 3 like to just verify that, using both versions of the plan. I
- 4 need the old and new Volume 4s.
- 5 Have you got a specific message?
- 6 Q Any of the messages where they're giving instructions
- 7 to the public with respect to sheltering? I believe E or F.
- 8 A (Callendrello) I've got Message F from the New
- 9 Hampshire plan dated 8/86, and I'm in Appendix G to Volume 4,
- 10 Message F which is page 18 of 26. And I see a reference that
- 11 says, "Take a radio with you and move to the basement, if you
- 12 have one, or move to the room with fewest windows and doors."
- 13 And in the 2/88 version of the messages, again
- 14 Appendix G to Volume 4, Message F, the statement, the
- 15 comparable statement says: "Take a radio with you and move to
- 16 the room with fewest windows and doors." So that the
- 17 statement, "Move to the basement, if you have one," has been
- 18 deleted.
- 19 Q Do you know why it was decided to drop this
- 20 recommendation?
- 21 A (Callendrello) No, I don't. Maybe Mr. Strome does
- 22 or Mr. Bonds.
- 23 A (Strome) I do not.
- Q Would you agree that if someone has a basement to
- 25 shelter in that it would be to their advantage to shelter in

- 1 the basement rather than in upstairs rooms of the house?
- 2 A (Strome) I defer that to Public Health, but I think
- 3 there are some obvious reasons why you -- why you get into an
- 4 area with fewer natural openings.
- 5 A (Wallace) In general, yes, in answer to your
- 6 question.
- 7 Q Isn't it true that shielding factors are where the
- 8 basements provide greater shielding from radiation than upper
- 9 stories of a house?
- 10 A (Wallace) As a general rule, yes, that's correct.
- 11 Q The new message has also deleted a recommendation to
- 12 use respiratory protection if people went outdoors; is that
- 13 accurate?
- 14 A (Callendrello) Yes, it is.
- 15 Q Dr. Wallace, do you know why this recommendation was
- 16 dropped?
- 17 A (Wallace) No, I do not.
- 18 Q Would you agree that if people do go outdoors that
- 19 it's advisable to use some type of respiratory protection?
- 20 A (Wallace) That would in general depend upon the
- 21 nature of the release, the components, what's there. But
- 22 certainly respiratory protection, you know, in instances where
- 23 there are certain particulates and the things that you want to
- 24 protect against, respiratory protection would do that.
- 25 Q Has any consideration been given to recommending

- 1 respiratory protection for people while they're indoors?
- 2 A (Bonds) In general, yes. That's the point behind
- 3 the closing of the windows, the turning off the fans, is to
- 4 Keep the particulates on the outside, don't bring them inside;
- 5 that is a form of respiratory protection.
- 6 Q But there's been no consideration in terms of putting
- 7 toilet paper, for instance, over one's mouth?
- 8 A (Bonds) No, there has not.
- 9 Mr. Bell, I'd like to ask you a few questions now.
- 10 A (Callendrello) Just move him up to the front and
- 11 make it a little easier.
- 12 Q Sure.
- 13 A (Strome) And I'd like to comment on the thrust of
- 14 the questions that you've been asking, counselor, if I could.
- 15 The messages have been forwarded as updates to FEMA for
- 16 comment, so that if there's -- these are not absolute final
- 17 products and I think that you should be aware of that.
- 18 Q Well, all I can do is deal with what I have before
- 19 me.
- 20 A (Strome) I beg your pardon?
- 21 Q I just have to look at what I have before me, is the
- 22 plan.
- 23 A (Strome) I understand that, but I wanted to make
- 24 sure that we raised your level of awareness to that level.
- Q Mr. Bell, it's your company that performed the survey

- 1 of potential shelters, which I believe is Exhibit 2 to
- 2 Applicants' direct testimony?
- 3 A (Bell) That's correct.
- 4 Q Were you personally involved in that survey?
- 5 A (Bell) Yes, I was.
- 6 Q And what was your role specifically?
- 7 A (Bell) I did probably more than 50 percent of the
- 8 work and I coordinated the writing of the report.
- 9 Q By doing -- when you say you did 50 percent of the
- 10 work, does that mean you reviewed the tax assessor's cards and
- 11 filled out the shelter survey forms that formed the basis of
- 12 the final list?
- 13 A (Bell) Yes, a large part of them, but not all of
- 14 them.
- 15 Q And was it your understanding with respect to that
- 16 study that it was to be used by New Hampshire Yankee only as a
- 17 preliminary first step in the planning process to identify
- 18 actual usable sheltering space?
- 19 A (Bell) Yes.
- 20 Q And is it also true that it was intended only to
- 21 identify space that might potentially service shelters as
- 22 opposed to space Stone & Webster knew to be actually available
- 23 and usable as shelters?
- 24 A (Bell) That's correct. We were to find potential
- 25 space.

- 1 Q And did you also work on the earlier draft of the
- 2 Stone & Webster report dated March 1986?
- 3 A (Bell) Yes, I did.
- 4 Q And what was the purpose of that first study?
- 5 A (Bell) I would rather have Mr. Callendrello answer
- 6 that, he has the entire history of why they wanted to do it.
- 7 Q Well, I'd like -- what were your instructions in
- 8 preparing that study? What was your understanding of the aim
- 9 of that study?
- 10 A (Bell) The aim of that study was to find shelter
- 11 space, the total potential shelter space that was either
- 12 masonry or basement structure that would provide the sheltering
- 13 factors as presented in, say, the Aldrich study that talks
- 14 about .6, .4 shielding factors of that type.
- 15 Q Now, do you know why you were told to limit yourself
- 16 to shielding factors of the type you just described?
- 17 A (Bell) Yes.
- 18 Q Could you tell me, please?
- 19 A (Bell) There were -- well, I think I would rather
- 20 have Mr. Callendrollo explain that.
- Q Well, let me ask you one question and then maybe I'll
- 22 turn to Mr. Callendrello. That earlier draft did state, isn't
- 23 it true, that, quote: "Wood frame buildings without basements
- 24 were not included because this type of building usually does
- 25 not provide sufficient shielding?"

1	A (Bell) That's what the words say in the report. But
2	what it was meant was, that for the purposes of that study the
3	wood frame buildings were not considered to be adequate for the
4	purposes of that study, for what the study was being used for.
5	Q Well, this says it usually does not provide
6	sufficient shielding; is that right?
7	A (Bell) I guess if you say .9 is not sufficient, then
8	that would be correct. I don't know if I agree with that for
9	all situations.
10	Q Did you write this?
11	A (Bel') Yes.
12	(Continued on next page.)
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	

et/57

- 1 Q You're not a health physicist, are you?
- 2 A (Bell) No, I am not. I have some knowledge in that
- 3 area, but I am not a health physicist.
- 4 Q Who did make the decision to change the criteria
- 5 from -- change the criteria to .9 shielding?
- 6 A (Bell) New Hampshire Yankee. The second study had a
- 7 different purpose.
- 8 Q And that purpose, I take it, was just to identify all
- 9 public space in the beach area?
- 10 A (Bell) Yes, within the NHRERP criteria of .9
- 11 shielding factor.
- 12 Q Mr. Callendrello, what was the basis for New
- 13 Hampshire Yankee's decision to now include .9 shelters in this
- 14 study?
- 15 A (Callendrello) In order to understand the basis for
- 16 doing that, it may be important to understand the purpose of
- 17 the original study.
- In late 1985, New Hampshire Yankee asked Stone &
- 19 Webster to perform an inventory of potential shelter space in
- 20 the beach areas. And the direction for that study was to
- 21 define the inventory buildings that met the shielding factor.
- 22 or equivalent to a shielding factor that would be provided by a
- 23 masonry building, because at the time New Hampshire Yankee was
- 24 working with the Commonwealth of Massachuserts to define a
- 25 strategy for sheltering the beach population 'hat would be

- 1 acceptable to the Attorney General and to the Governor, and as
- 2 I understand that proposal, that proposal was to construct
- 3 shelters for the beach population.
- The initial Stone & Webster study was intended to at
- 5 least be a scoping document as to what magnitude of a project
- 6 was involved in that proposal. Because the proposal was to be
- 7 a masonry building, the scope of the shelter study was to look
- 8 at buildings that were of comparable shielding factor, or dose
- 9 reduction factor. That is a building that's masonry or one
- 10 with a basement.
- 11 And that shelter study, I understand, was provided
- 12 to -- in fact, I think it was provided to you as well as other
- 13 members of the Attorney General's office and the Secretary of
- 14 Public Safety and what was called at the time the Seabrook
- 15 Watchdog Committee for their review prior to the Governor's and
- 16 the then Attorney General's proposal at the end of March 1986,
- 17 that they would be willing to allow operation of Seabrook if
- 18 there was a summer shutdown pending the evaluation and
- 19 construction of shelters for the beach population.
- Then the shelter study lay fallow for awhile, until
- 21 the issue of sheltering the beaches in New Hampshire arose
- 22 again. And at that point the focus of the study took on a
- 23 different turn, and that is, we were looking to provide an
- 24 evaluation of the shelter capacity consistent with my
- 25 understanding of the concept of shelter. And that is -- and

- 1 this was consistent with the NRC's staff position as I've seen
- 2 in at least a few cases, the Byron case, for example, that said
- 3 essentially sheltering is -- you do the best you can with what
- 4 you have.
- 5 We needed to determine what we had, what we had on
- 6 the beach. And to do that, we needed to establish what the
- 7 dose reduction factor criteria were that these buildings would
- 8 have. And since the state was using .9, based on their own
- 9 innate knowledge of the buildings that exists throughout the
- 10 EPZ, we established that as the criteria which Mr. Bell looked
- 11 at in his revisit to the area, looked at the structures.
- 12 Q And I assume the first study did not look at these .9
- 13 structures because those were not considered suitable for
- 14 shelter; is that right?
- 15 A (Callendrello) No, they were not looked at; at least
- 16 they were not included in the inventory of potential shelter
- 17 space, because they weren't consistent with the level of
- 18 construction that the proposed shelters in Massachusetts would
- 19 be; that is, a masonry construction.
- 20 Q Mr. Bell, I take it you spent a good deal of time in
- 21 Hampton Beach looking at these shelters; is that accurate?
- 22 A (Bell) Yes, both looking at the tax records and out
- 23 in the field looking at the shelters.
- 24 Q So you have a good idea of the type of building and
- 25 the range of buildings that are in the beach area?

- 1 A (Bell) Yes.
- 2 Q Well, I would like to have you suppose a
- 3 hypothetical. Assume that you were on Hampton Beach with your
- 4 family and heard the emergency message directing you to go
- 5 indoors because there is a radiological release at Seabrook
- 6 Station.
- 7 Based on your knowledge of the buildings in the area,
- 8 would you go to the nearest accessible building in which you
- 9 could find space, or would you look for the building which in
- 10 your opinion would provide you the best protection from
- 11 radiation?
- MR. LEWALD: I'm going to object to the question.
- Using this witness as though he were a captive
- 14 audience to throw general hypotheticals at that don't go to his
- 15 expertise at all, but as a beachgoer, and this is taking unfair
- 16 advantage of this particular panel.
- JUDGE SMITH: Well, the panel asserted at the outset
- is that each member of the panel is there to defend the entire
- 19 testimony. Now, if -- that doesn't seem to make sense in every
- 20 instance, but that was their assertion.
- 21 If he feels he has no particular expertise to answer
- 22 that, that's fine.
- Objection overruled. I mean, it is relevant to the
- 24 testimony as a whole.
- MR. LEWALD: That he and his family are at the beach

- 1 and what he's going to do? I submit that's beyond the scope of
- 2 the testimony, Your Honor.
- 3 MR. FLYNN: I'd like to ask for a clarification of
- 4 the question.
- Is the witness being asked to pretend that he's not
- 6 an expert, but just an average beachgoer, and to predict what
- 7 the average beachgoer would do? Or is he being asked for his
- 8 expert opinion about which is the better shelter?
- 9 JUDGE SMITH: You may not think it's the greatest
- 10 question in the world, but, again, this is her cross-
- 11 examination, and if it's relevant to the direct examination,
- 12 she's allowed to ask it.
- MR. FLYNN: Your Honor, that was not an objection. I
- 14 was simply asking for a clarification.
- 15 JUDGE SMITH: I see. Okay.
- 16 Could you clarify?
- MS. SNEIDER: He's supposed to assume he's just who
- 18 he is on the beach.
- JUDGE SMITH: But is this -- what part of the
- 20 direct --
- MS. SNEIDER: Using whatever knowledge he knows about
- 22 the beach area from being in the beach area.
- JUDGE SMITH: What part of the direct testimony is
- 24 this question addressed?
- MS. SNEIDER: Well, it's going to responses to

- 1 questions posed yesterday to the panel that people would get
- 2 indoors immediately.
- 3 JUDGE SMITH: It's certainly not relevant to Exhibit
- 4 2.
- 5 MS. SNEIDER: If I may.
- 6 JUDGE SMITH: Applicants' Exhibit 2.
- 7 MS. SNEIDER: It's relevant to the sentence on Page
- 8 20 of the testimony that says, "It is expected that people will
- 9 comply with EBS announcements to take shelter, and that
- 10 owners/operators of public access facilities will make their
- 11 facilities available for this very limited purpose."
- JUDGE SMITH: I think the relevance is very marginal,
- 13 but you can propound the question.
- 14 MS. SNEIDER: Thank you, Your Honor.
- 15 THE WITNESS: (Bell) Would you please repeat that
- 16 question or have it repeated so I fully understand?
- 17 BY MS. SNEIDER:
- 18 Q If you are on Hampton Beach with your family and
- 19 heard the emergency message directing you to go indoors because
- 20 of a radiological release at Seabrook Station, would you go to
- 21 the nearest accessible building in which you could find space,
- 22 or would you look for the building which in your opinion would
- 23 provide you the best possible protection from radiation?
- 24 A (Bell) I would probably listen to the message, and
- 25 decide -- try to decide based upon the knowledge of the area

- 1 that I have and the understanding that I have of shielding
- 2 factors. If I thought I had enough time to seek a better
- 3 shelter, I might seek a better shelter, or try to go to a large
- 4 building that I knew had a basement, or could remember.
- 5 But if I couldn't, if I thought it was imminent
- 6 danger, then I would go to the nearest building and go inside
- 7 with my family.
- 8 Q Okay, thank you.
- 9 Dr. Wallace, is it correct to say that .9 shielding
- 10 would result in a savings of six minutes of exposure out of an
- 11 hour?
- 12 (Witnesses confer.)
- 13 JUDGE SMITH: Could you insert the word "equivalent"
- 14 in there? The way the questions stand is that sheltering -- so
- 15 it's equivalent to six minutes in an hour. Sheltering at .9
- 16 would be equivalent.
- 17 MS. SNEIDER: Right.
- THE WITNESS: (Wallace) Well, we've gone from time
- 19 to -- we're sort of mixing up time and dosages. But if you had
- 20 an hour of exposure time and you had, you know, 10 percent of
- 21 that, obviously six minutes is 10 percent of an hour.
- 22 So I guess the answer to your question is, yes, it's
- 23 six minutes. If there were going to be a whole hour, you save
- 24 six minutes of exposure.
- 25 BY MS. SNEIDER:

- 1 Q So then sheltering in a building with . 9 shielding
- 2 factor would be comparable to -- you would get -- as opposed to
- 3 being -- let me rephrase that and start all over.
- 4 Sheltering for one hour in a building with .9
- 5 shielding would be equivalent to being outdoors for 54 minutes
- 6 as opposed to an hour; is that right?
- 7 (Witnesses confer.)
- 8 JUDGE SMITH: Either I haven't understood the
- 9 question, or I can't imagine the need to consult.
- 10 (Laughter.)
- 11 THE WITNESS: (Wallace) I guess the answer is yes.
- 12 MS. SNEIDER: Thank you.
- 13 THE WITNESS: (Wallace) Obviously, we were thinking
- 14 of all kinds of, you know, different parameters and
- 15 possibilities, but basically, yes, that's what we're saying.
- 16 BY MS. SNEIDER:
- 17 Q Is it true that in order to take shelter on Seabrook
- 18 and Hampton beaches that a large number of people would in fact
- 19 be moving in the direction of the reactor to take shelter?
- 20 A (Wallaca) If across the street, you know, wherever
- 21 they are, and across the street is, you know, towards the west
- 22 towards the direction of the reactor, yes.
- 23 A (Callendrello) I agree that some people would have
- 24 to move in a westerly direction, or southwesterly direction
- 25 which would be closer towards Seabrook.

- I just want to be careful that we've characterized
- 2 the number as large. Large in my mind does not necessarily
- 3 mean a majority. It would be those persons that are not
- 4 already in a building, or those people obviously that are to
- 5 the east of the strip of land that contains the buildings.
- 6 I just wanted to clarify the number large.
- 7 I expect it to be something less than the peak
- 8 population.
- 9 Q Did you say those people that are east of the strip
- 10 of land that contains the building would not be moving?
- 11 A (Callendrello) No, that would be moving.
- 12 Q Okay.
- 13 A (Callendrello) Closer towards the plant; at least by
- 14 a couple hundred feet at the least.
- 15 Q And in some cases people moving off the beach might
- 16 need to move 200 or 300 yards inland or westerly in order to
- 17 take shelter; is that right?
- 18 A (Callendrello) In some cases, that's right.
- 19 Q Isn't it possible that by moving 200 or 300 yards
- 20 closer to the reactor, that people may experience radiation
- 21 levels that are enough higher to more than compensate for 10
- 22 percent reduction due to sheltering?
- 23 JUDGE SMITH: As compared to what?
- MS. SNEIDER: I'm comparing moving to a shelter.
- 25 JUDGE SMITH: To Spain, perhaps.

- 1 MS. SNEIDER: As compared to staying on the beach -2 JUDGE SMITH: All right.
- 3 MS. SNEIDER: -- and not taking shelter.
- 4 JUDGE SMITH: Okay.
- 5 THE WITNESS: (Callendrello) I think Mr.
- 6 MacDonald --
- 7 THE WITNESS: (Wallace) Could I ask Mr. MacDonald,
- 8 the health physicist. to comment on that?
- 9 MS. SNEIDER: Sure.
- 10 THE WITNESS: (MacDonald) That's really hard to say.
- 11 You'd have to look at the whole radiation field from the
- 12 accident situation and the plume and the plume characteristics
- 13 and the whole definition of field strength as a function of
- 14 distance. And it could actually be with the meteorological
- 15 conditions that would be represented on a hot summer day that
- 16 the exposure would be less as a function of distance, even in
- 17 closer.
- 18 It depends on the plume characteristics and the
- 19 height of the plume at the beach.
- 20 BY MS. SNEIDER:
- 21 Q And in some situations that could be the case.
- 22 A (Wallace) Could be the case.
- 23 JUDGE SMITH: Let me understand. This line of
- 24 questioning would ask you to take into account a few hundred
- 25 feet to the west compared to standing still on the beach; is

- 1 that where you're going?
- MS. SNEIDER: Right. I just had one --
- 3 JUDGE SMITH: How long do you intend to stay on this
- 4 line?
- E58 5 MS. SNEIDER: That was it.
- T59 6 BY MS. SNEIDER:
  - 7 Q Okay, Mr. Bell, there are a number of buildings that
  - 8 were not included in Stone & Wabster's list of shelters that
  - 9 are in Hampton and Seabrook beach, public buildings; is that
  - 10 right?
  - 11 A (Bell) Very small number.
  - 12 Q And was the reason for that that they did not -- that
  - 13 those buildings did not appear to have .9 shielding factors?
  - 14 A (Bell) In some case, yes.
  - In some cases, it was because they were closed, and,
  - 16 of course, we have removed buildings that have burned down for
  - 17 the most part, to our knowledge. Those buildings, of course,
  - 18 were not included.
  - 19 Q Ol;ay, you just mentioned removing buildings that had
  - 20 burnt down.
  - 21 What checks did Stone & Webster make to see whether
  - 22 the space indicated on the list actually does exist?
  - 23 A (Bell) I don't understand. Could you rephrase that
  - 24 question, please?
  - Q Well, maybe we should start with the process that

- 1 Stone & Webster used for identifying space.
- 2 It's my understanding, and correct me if I'm wrong,
- 3 that Stone & Webster went to the tax assessor's cards and got
- 4 information on the available space; is that correct?
- 5 A (Bell) That's correct.
- 6 Q Okay. And did you -- what did you do after doing
- 7 that to make sure that that space was indeed available, or that
- 8 a building that you identified on that list was still there?
- 9 A (Bell) We went from looking at the tax assessor's
- 10 records out into the field to make sure that that building did
- 11 exist.
- 12 Q Okay.
- 13 JUDGE SMITH: I beg your pardon?
- MS. SNEIDER: I'm going to hand up this form that I
- 15 would like to have marked for identification.
- 16 JUDGE SMITH: Do you intend to offer it?
- Normally we don't want it marked for identification
- 18 if you don't intend to offer it.
- MS. SNEIDER: Yes, I do intend to crier it.
- 20 JUDGE SMITH: All right.
- MR. LEWALD: Could we see it, Your Honor?
- 22 MS. SNEIDER: Yes.
- 23 (Pause.)
- 24 BY MS. SNEIDER:
- Q Can you identify this form, Mr. Bell?

- 1 A (Bell) Yes.
- 2 A (Callendrello) Is it possible to get another copy of
- 3 that form?
- 4 Thank you.
- 5 MS. SNEIDER: I believe this form should be marked
- 6 Exhibit 14 for identification.
- 7 (The document referred to was
- 8 marked for identification as
- 9 Massachusetts Attorney General's
- 10 Exhibit No. 14.)
- 11 BY MS. SNEIDER:
- 12 Q And is this a shelter survey form for the Hampton
- 13 Beach Casino?
- 14 A (Bell) That's correct.
- 15 Q And this is the form you filled out in calculating
- 16 the amount of potential area, shelter area available?
- 17 A (Bell) It looks like it.
- 18 Q Okay. Now there is a number of numbers listed
- 19 besides the item marked structure description. Do you see
- 20 that?
- 21 A (Bell) Yes, I do.
- 22 Q And there's one that's been circled there which says
- 23 3SFR/B, then 932 per equals 2886. Do you see that?
- 24 A (Bell) Yes.
- 25 Q Could you explain what that means, please?

1	A (Bell) That means a three-story, frame building on
2	top of a basement.
3	Q Okay. And then where
4	A (Bell) And there's 962 square feet per story times
5	three is 2886.
6	Q Okay. And looking down under where it says
7	nonbasement and basement; is that the total nonbasement square
8	footage and the total basement square footage for that
9	building?
10	A (Bell) That is correct.
11	Q And the 962 that's listed there under basement, is
12	that the 962 for the basement?
13	A (Bell) For the basement part. The 2886 is the three
14	stories above that 962 square foot.
15	Q Okay.
16	MS. SNEIDER: I'd also like to have this second
17	exhibit I'm now handing you now marked as Mass. Exhibit 15 for
18	identification.
19	JUDGE SMITH: That's Massachusetts Attorney General
20	Exhibit 15.
21	(The document referred to was
22	marked for identification as
23	Massachusetts Attorney General's
24	Exhibit No. 15.)

1	BY MS. SNEIDER:
2	Q Is this a tax assessor's property card, Mr. Bell?
3	A (Bell) Yes I believe it is.
4	Q And could you identify this as a card that was used
5	in arriving at the figures that we just talked about, the 962
6	basement and three-story frame figures that we just discussed?
7	Did those figures come from your looking at this
8	card?
9	A (Bell) Yes. Plus, I also had a drawing of the
10	entire building which was also part of the tax record.
11	As you can see at the top of the shelter survey form,
12	I put a note to myself to copy the drawing of the building,
13	which I did, which was more than just this one sketch that
14	appears on the tax assessor's record.
15	Q Okay, now if you could turn that over and look at the
16	bottom, the comments, the bottom right-hand corner.
17	MS. SNEIDER: And I would like to explain to
18	everybody else that I have just realized that the comments did
19	not come out on the xerox copies, and I will make new copies at
20	the break so that everybody else can get a complete exhibit.
21	BY MS. SNEIDER:
22	Q And can you tell me what that says there?
23	A (Callendrello) It says 5/31/83, building torn down.
24	Q So I take it that building is no longer there?

A (Bell) That's what this indicates.

1	MS. SNEIDER: I'd like to offer those two documents
2	into evidence at this point.
3	JUDGE SMITH: Are there objections?
4	MR. LEWALD: No objection.
5	JUDGE SMITH: Massachusetts Attorney General Exhibits
6	14 and 15 are received into evidence.
7	(The documen's referred to,
8	having been previously marked
9	for identification as
10	Massachusetts Attorney General's
1.	Exhibit Nos. 14 and 15 were
12	received in evidence.)
13	MS. SNEIDER: Your Honor, could we take a very short
14	break? The remainder of my cross is going to involve showing
15	some slides, and I just wanted to set up the projector and
16	screen.
17	JUDGE SMITH: Let's take our midmorning break now for
18	15 minutes.
19	(Whereupon, a recess was taken.)
20	(Continued on next page.)
21	
22	
23	
24	
25	

E59

1	MS. SNEIDER: I'd like to have this handout marked
2	Exhibit 16 for identification.
3	JUDGE SMITH: You should give a description of what
4	it is at this point.
5	MS. SNEIDER: Okay. Shelter survey form of
6	Jeanette's Sea Shoppe.
7	JUDGE SMITH: I beg your pardon?
8	MS. SNEIDER: It's called a Shelter survey form, and
9	the name across the top is Jeanette's Sea Shoppe, Philbrick's
10	Convenience Store.
11	(The document referred to was
12	marked for identification as
13	Massachusetts Attorney General's
14	Exhibit No. 16.)
15	THE WITNESS: (Callendrello) Before we start with
16	this form, unfortunately Mr. Oleskey asked that he get our copy
17	of it back, the tax assessor's card, and I don't recall the
18	exhibit number.
19	I just don't want there to be any misimpression on
20	what was reached what we stated regarding that card. That
21	card indicated that the space that is over the 962 square foot
22	footprint, which Mr. Bell took credit for as a total gross
23	space of 2,886 feet had been torn down.
24	The shelter survey form, which was the previous
25	exhibit, indicates the shelter survey space for the entire

- 1 Hampton Beach Casino, which is a total 110,000 square feet, of
- 2 which -- included in that total is the 2,886 square feet. So
- 3 it's that small portion of the total space that is represented
- 4 by the assessor's card as indicated as being torn down.
- 5 BY MS. SNEIDER:
- 6 Q Just one minor point of clarification. That's 2,886
- 7 square feet of frame building, plus 962 square feet of
- 8 basement; is that right?
- 9 A (Callendrello) Yes.
- 10 Q Okay. Mr. Bell, can you identify this survey form
- 11 I've placed in front of you?
- 12 A (Bell) Yes, I believe it's one of our shelter survey
- 13 forms. That's not my writing, but it's the writing of one of
- 14 the prople that helped me with this.
- 15 Q Okay. And I take it from the title here that it's
- 16 the shelter survey form for the Jeanette's Sea Shoppe,
- 17 Philbrick's Convenience Store; is that correct?
- 18 A (Bell) That's correct.
- 19 Q And looking at the portion that's circled in the
- 20 middle of the form on the right side of the page, I believe it
- 21 says market, two times 2176 equals 4352; and store, two times
- 22 2136 equals 4272.
- Do you see that?
- 24 A (Bell) Yes.
- 25 Q And is that the calculation for the square footage of

1 the market and the store?

2	A (Bell) That's the calculation of the square footage,
3	gross square footage for the building which we rounded off to
4	8600 square feet, and the net space that we used for this
5	particular building is one-third of that.
6	Q Okay.
7	A (Bell) As available shelter space, potentially
8	available shelter space.
9	Q And what does the two represent in the two times
10	or two at 2176?
11	A (Bell) Probably two stories. Number of nonbasement
12	stories is two.
13	Q And looking over there to the left under structure
14	description, that says two story with apartments; is that
15	right?
16	A (Bell) Yes.
17	Q Okay, I'd like to 'and you now and have marked for
18	identification Mass. Attorney General's Exhibit No. 17, a tax
19	assessor's form for the Jeanette's Sea Shoppe, Philbrick's
20	Store, and this is in two pages.
21	(The document referred to was
22	marked for identification as
23	Massachusetts Attorney General's
24	Exhibit No. 17.)

- 1 BY MS. SNEIDER:
- 2 Q Mr. Bell, is this the tax assessor's form for the
- 3 Philbrick's Store?
- 4 A (Bell) This is the first time I'm seeing this
- 5 because one of my assistants did this, and we did not copy tax
- 6 assessor's records. We just copied the information that we
- 7 felt necessary off of a tax assessor's records on to our
- 8 worksheet, and the worksheet I have seen. I have not seen
- 9 these tax assessor's records before.
- 10 But from what it says on top, it looks like it's the
- 11 Philbrick's Store tax assessor record.
- 12 Q And do you see listed under market, the figure 2176
- 13 square feet?
- 14 A (Bell) Yes.
- 15 Q And under retail store, the figure 2136 square feet?
- 16 A (Bell) Yes.
- 17 Q And am I right, that's comparable to the 2176 square
- 18 feet and the 2136 square feet written down on Stone & Webster's
- 19 shelter survey form?
- 20 A (Bell) Yes.
- MR. LEWALD: Do we have that? Were we given that as
- 22 an exhibit, the shelter form?
- MS. SNTIDER: Yes, that's the one I handed you.
- MR. LEWALD: Jeanette's?
- MS. SNEIDER: Jeanette's Sea Shoppe, Philbrick's

- 1 Store.
- 2 BY MS. SNEIDER:
- 3 Q And looking at the top of the calculator cost form,
- 4 that says name of building Philbrick's Store, et cetera; is
- 5 that right?
- 6 A (Bell) Yes.
- 7 Q All right, and looking at Line 7 of the calculator
- 8 cost form where it says number of stories and height per story,
- 9 what is the number of stories for the market?
- 10 A (Bell) One.
- 11 Q And for the retail store?
- 12 A (Bell) One.
- 13 Q And would you agree that the second page of that form
- 14 also says one story for each of those two areas?
- 15 A (Bell) Yes.
- 16 Q Mr. Bell, could you identify this building?
- 17 A (Bell) No.
- 19 Q Can you tell me how many stories on the left building
- 19 here?
- MR. FLYNN: Objection; relevancy.
- JUDGE SMITH: Overruled.
- MR. LEWALD: Which building are you talking about,
- 23 the one on the left or the one on the right?
- 24 THE WITNESS: (Bell) To me it looks like that slide
- 25 shows a one-story wing on the left side, and a two-story

- 1 building attached to it. I'm not sure if it's attached, but it
- 2 looks like it is, on the right-hand side.
- 3 MS. SNEIDER: Okay.
- 4 JUDGE SMITH: I assume you're going to establish that
- 5 this is indeed the building alluded to in the --
- 6 MS. SNEIDER: Yes, if I can't establish it through
- 7 this witness, I will establish it through my own witnesses.
- 8 MR. DIGNAN: Ms. Sneider, can you represent to me
- 9 that that is the building?
- 10 MS. SNEIDER: I will represent to you that that is
- 11 the building.
- 12 MR. DIGNAN: I'll stipulate to that.
- MS. SNEIDER: Thank you.
- 14 MR. TURK: I'm not sure I understand the stipulation.
- 15 Is it a two-part building with the second story included in it
- 16 or not?
- 17 The witness said he couldn't tell if it was a
- 18 detached single-story structure, or if that structure was
- 19 attached to the two-story structure to the right. And I'm not
- 20 sure what the representation is of counsel.
- MS. SNEIDER: I'll represent that it's the market and
- 22 retail store that we're discussing are the building to the left
- 23 and the building on the first floor to the right, and they are
- 24 attached.
- MR. TURK: What's on top of it? What's the second

- 1 story of the building to the right?
- MS. SNEIDER: If you look on the calculator cost form
- 3 and the tax assessor's card, those buildings are apartments.
- 4 And if you also look at the bottom of the Stone & Webster
- 5 shelter surve form, it says two story with apartments.
- 6 BY MS. SNEIDER:
- 7 Q And just to make this clear, the Stone & Webster did
- 8 calculate the market and store square footage as having two
- 9 stories; is that right?
- 10 A (Bell) No, that calculation was my calculation from
- 11 this shelter survey form obtained by one of my assistants. I
- 12 looked at the form, and it said two stories. I multiplied the
- 13 area by two because I thought it was two stories. And I got
- 14 8624 square feet for a two-story building with that area as the
- 15 gross area. And then multiplied that by a third, which is what
- 16 the little letter "c" next to the 8 in the circled 8600 at the
- 17 top of the page means.
- So we took available, potential available shelter
- 19 space credit for that building as one-third of 8600 square
- 20 feet. So it would be -- haven't done the math yet, but it's
- 21 two thousand something.
- 22 Q Well, the one-third deduction is what you always
- 23 deduct for a retail store; is that correct?
- 24 A (Bell) That's correct.
- 25 Q And that's because of the room taken up inside the

- 1 store with the items for sale and the counters and storage, et
- 2 cetera?
- 3 A (Bell) Yes, these were the numbers given to me by
- 4 New Hampshire Yankee as availability factors they had
- 5 determined and asked me to use.
- 6 Q Okay, and that --
- 7 A (Callendrello) Just to make sure that that is clear,
- 8 you asked as a one-third deduction. It is a one-third
- 9 multiplier which is a little different animal.
- 10 Q Okay, deducting two-thirds.
- 11 A (Callendrello) Right.
- 12 Q Okay, and your total square footage was based on
- 13 multiplying 2176 by two stories for the market area, and 2136
- 14 square feet by two stories for the store area, just to be
- 15 clear.
- 16 A (Bell) Yes.
- 17 Q Okay. I'd like to now show you a slide that -- well,
- 18 I will represent to you as Bev's Deli on Ashworth Avenue, which
- 19 is a building not included in Stone & Webster's list of
- 20 potential shelter space.
- 21 Are you familiar with this building?
- 22 A (Bell) Not offhand, no.
- 23 A (Callendrello) What was the name of that again?
- 24 Q Bev's Deli.
- 25 A (Callendrello) And what was the address again?

- 1 Q It's on Ashworth Avenue.
- 2 A (Bell) What's the street number?
- 3 Q I don't have that with me.
- 4 A (Bell) Do you have the tax map and lot number?
- 5 Q No, we're finished with the tax assessor's cards.
- 6 A (Bell) I don't recognize this, but I've looked at an
- 7 awful lot of buildings up there and I can't remember every
- 8 single one of them.
- 9 Q Well, that's understandable.
- 10 Could you indicate to me by looking at this slide why
- 11 Stone & Webster might not have put this building -- included
- 12 this building with its list of potential shelters?
- 13 A (Bell) After I finished my entire list of shelter
- 14 survey forms, a gentleman from Stone & Webster were with me, or
- one of my assistants, and looked at every single building, and
- 16 he did reject a few as being what he considered not meeting the
- 17 New Hampshire RERP.
- This could be one of them, but I can't be sure.
- 19 Q Well, then you would agree, of course, by looking at
- 20 this slide that it does not appear suitable for sheltering?
- 21 A (Bell) No, I can't agree to that. That's beyond --
- 22 I don't evaluate buildings as whether they're meeting the .9 or
- 23 not.
- 24 A (Callendrello) I'm having a little trouble seeing
- 25 the whole building. Is that part that appears white in the

- 1 photo, is that attached to anything? It doesn't appear to be
- 2 attached to anything from here, but I can't tell.
- 3 Q The delicatessen, the retail -- I mean the commercial
- 4 establishment is the red and white part of the building.
- 5 A (Callendrello) My question is, is that attached to
- 6 another building directly behind.
- 7 Q Yes, it is.
- 8 A (Callendrello) Okay.
- 9 Q Well, Dr. Wallace, would you recommend that someone
- 10 seek shelter in a building such as this.
- JUDGE HARBOUR: I object to this line of questioning.
- 12 All of these gentlemen here have said that they don't recognize
- 13 this building, they don't know what it is, and now you're
- 14 trying to get them to look at a slide, which is not a very good
- 15 quality slide, and to make decisions as to whether it would or
- 16 would not be good as a shelter, and I just don't see how this
- 17 is evidence.
- 18 MR. DIGNAN: Could I ask the Board sustain Judge
- 19 Harbour's objection? I'll adopt it.
- MS. SNEIDER: If I could respond.
- JUDGE SMITH: Well, what do you have in mind here?
- MS. SNEIDER: What I have in mind is to get some
- 23 understanding of the criteria that the state would use in
- 24 evaluating what is suitable shelter, what is not suitable
- 25 shelter, and if this shelter -- just as a representative of

- 1 building -- if this type of structure would be suitable shelter
- 2 space.
- 3 JUDGE SMITH: So this building could be out in Kansas
- 4 as far as your line of questioning is concerned. It doesn't
- 5 relate to any issue that we have before us except as a specimen
- 6 and point which they can address their --
- 7 MS. SNEIDER: Right.
- 8 JUDGE SMITH: -- judgment of criteria.
- 9 MS. SNEIDER: Right.
- MR. TURK: Your Honor, the problem is it's difficult
- 11 from this slide, maybe it's the lighting with which the picture
- 12 was taken, but it's difficult to see if the front area is
- 13 attached to something.
- 14 If you're talking about the suitability of the
- 15 building as a shelter, that would have to consider whether or
- 16 not the back portions of the building are suitable, not just
- 17 this part.
- JUDGE SMITH: We appreciate all that. We see that
- 19 there are inherent weaknesses in the slide and what is
- 20 presented here that, although we harbor doubts as to how this
- 21 line is going to come out, counsel certainly has a right to
- 22 explain to us what she was trying to do here.
- 23 MS. SNEIDER: Your Honor, and I do have witnesses
- 24 that are prepared to come forward and identify these slides at
- 25 a later point if the witnesses on the panel aren't able to.

1	JUDGE SMITH: Well, are you representing to us that
2	this slide was included in the survey and well, no, you just
3	told us that you're not going to compare it with any assessment
4	that was made by Stone & Webster or the tax records.
5	Ultimately, how will you end up with this line? What
6	proposed finding will you think you can make on it?
7	MS. SNEIDER: Well, this is one building in the beach
8	area that people could go to for shelter. People don't know
9	what has been decided as suitable or unsuitable.
10	JUDGE SMITH: I see. This could be a false magnet to
11	people. This could be a magnet to people seeking shelter which
12	you say is not suitable shelter.
13	MS. SNEIDER: And there is two prongs to this. It's
14	also comparable to other buildings that have been included as a
15	list of potential suitable shelters.
16	JUDGE SMITH: This represents them? Could we perhaps
17	have a cut this whole thing short and have a stipulation
18	that there are buildings in the beach area which are not
19	suitable for shelter, and that there is some charge that some
20	people may go to those buildings if instructed to shelter?
21	Could that be stipulated?
22	(Continued on next page.)
23	
24	

E60

25

- 1 MR. LEWALD: Not that broadly, Your Honor. We can
- 2 stipulate as to a number, and this number is one or two, in the
- 3 entire half of the beach area that aren't suitable, but we
- 4 can't do it this broadly.
- 5 And I am not all sure -- that sure that this
- 6 particular building that's being displaced is not in the study.
- 7 JUDGE SMITH: All right.
- 8 MR. LEWALD: We have such a poor quality slide that
- 9 if I'm recognizing that building it's the corner of Ashworth
- 10 and J Street. On the front of it is a delicatessen. Tacked on
- 11 the back is another house, we're looking at there, and is a
- 12 picnic bench turned upside down in front of the house that's
- 13 tacked to the delicatessen.
- 14 And I am not at all sure that if we have a decent
- 15 slide that we couldn't recognize that as being a facility in
- 16 the study.
- 17 THE WITNESS: (Callendrello) Your Honor, that's why
- 18 I've asked some of the questions. I suspected that it was one
- 19 of the buildings that was identified in Mass. AG testimony, and
- 20 I have looked at those buildings that were identified and
- 21 remembered, at least one that looked like that, that was
- 22 attached to a larger building directly behind it.
- MR. LEWALD: We have a photograph, I think, of that
- 24 very building.
- 25 JUDGE SMITH: I think we could probably take a lot

- of, lots and lots of time taking these buildings one at a time
- 2 and arguing about whether it's suitable for shelter and whether
- 3 or not people might be drawn to it for shelter. And it's an
- 4 area where apparently the candidate shelters are known by the
- 5 parties. It seems to me it could be stipulated.
- 6 MR. LE.ALD: We'd be glad to attempt that, Your
- 7 Honor. Mr. MacDonald, on the panel, a health physicist has,
- 8 after the Stone & Webster survey, has combed this entire area,
- 9 looked at all of the buildings, both the residential and the
- 10 commercial buildings and we'd be glad to stipulate as to those
- 11 one or two that aren't suitable for shelter, at any shielding
- 12 level. If that would be helpful to you.
- MS. SNEIDER: Well, I'm not prepared to stipulate
- 14 that there's one or two buildings of this quality in the beach
- 15 area.
- 16 (Board conferring)
- 17 JUDGE SMITH: Can you identify this building?
- 18 THE WITNESS: (Callendrello) I believe it's 136
- 19 Ashworth, if it's the building I'm thinking of.
- JUDGE SMITH: Well, can you find out? I mean, is it
- 21 in that folder of building photographs?
- 22 THE WITNESS: (Callendrello) It was identified --
- MR. DIGNAN: Can we find out if the Attorney General
- 24 agrees with what Mr. Lewald said, this is a shot at the corner
- 25 of, I believe, it was Ashworth and J? That would go a long way

- 1 towards whether we've got the right building. We're guessing
- 2 and we're guessing because the slide is a lousy slide.
- 3 JUDGE SMITH: Let me point out to the Massachusetts
- 4 Attorney General, you've got a big problem here. See, you've
- 5 got a poor quality slide. You don't get anybody to identify
- 6 it. So the ball is in your court to move forward with
- 7 something reasonable, otherwise we're just going to cut you
- 8 off.
- 9 MS. SNEIDER: Your Honor, I'll continue to the next
- 10 slide. And, Your Honor, I apologize, I believe it's the
- 11 lighting in the projection that -- it's not the quality of the
- 12 slides, it's the viewing conditions in the room.
- JUDGE SMITH: Well, I didn't mean to cast any
- 14 aspersions of the photographer. It's exactly typical of most
- 15 of the slides in my collection.
- 16 (Laughter)
- 17 JUDGE SMITH: Except there's a little Kid standing in
- 18 the front of them.
- 19 (Laughter)
- MS. SNEIDER: I have viewed them in a -- I just want
- 21 to say, I have viewed them in a darker room and it was much
- 22 easier to see them and I apologize.
- I can't identify the exact address. This is another
- 24 building on Ashworth Avenue that I've been assured is not
- 25 included in the study.

- 1 BY MS. SNEIDER:
- 2 Q My question would be, is that, because of the great
- 3 amount of glass in the front of the building --
- 4 A (Bell) I don't know.
- 5 MR. FLYNN: Did the witness agree that that is not
- 6 one of the buildings in the survey?
- 7 THE WITNESS: (Bell) No, I don't agree to that; I'm
- 8 not sure whether it is or it isn't because I don't know what it
- 9 18.
- 10 JUDGE SMITH: As I understand, the issue has boiled
- 11 down to this, this slide and the one before it is being
- 12 offered --
- MS. SNEIDER: Your Honor --
- JUDGE SMITH: -- this slide and the one -- well, let
- 15 me -- I was waiting for Mr. Traficonte who was advising you.
- 16 This slide and the one before it is being offered for the
- 17 proposition that these are representative of buildings that are
- 18 not suitable for shelter, but that persons unsophisticated in
- 19 what sheltering should be would be attracted to them;
- 20 therefore, they would not be afforded the sheltering
- 21 anticipated. Now --
- MS. SNEIDER: There's a second prong to that also,
- 23 and that is, that these are comparable to buildings which I
- 24 intend to get into as soon -- after this slide, which are on
- 25 the list of potential shelters.

- 1 JUDGE SMITH: All right, can we --
- MS. SNEIDER: And I'm trying to get the distinction
- 3 why some buildings were excluded and some buildings were
- 4 included, and what the criteria was.
- 5 JUDGE SMITH: Okay. But can we move on and come up
- 6 with some quantity suggested by Mr. Lewald or to be produced by
- 7 the witness that there are indeed a certain number, and I
- 8 understand from Mr. Lewald that they believe it's a very small
- 9 number of buildings that were identified in the beach area and
- 10 rejected as potential for sheltering; and then move on to your
- 11 next point.
- MS. SNEIDER: Well, I --
- JUDGE SMITH: You came up with two apparently or a
- 14 few. didn't you? I mean --
- MS. SNEIDER: Well, we just -- I mean, we -- we're
- 16 only trying to show examples, I think, through my own
- 17 witnesses. I mean, we get much more into the numbers. The
- 18 slide show is only meant to be representative of the few
- 19 examples.
- 20 JUDGE SMITH: Representative of a larger group --
- MS. SNEIDER: No, I don't think that they're a great
- 22 deal of buildings that were rejected by Stone & Webster. I.
- 23 think there are a large number of buildings that are comparable
- 24 to this building in the beach area that are included on the
- 25 list.

- JUDGE SMITH: I don't think that you have a situation
- 2 where sampling type of evidence is likely to be probative,
- 3 because of the unique characteristics of buildings of this
- 4 nature, you know, each one is built -- added on to, some of
- 5 them are old. I don't think sampling -- I don't think you're
- 6 going to have reliable sampling type of evidence.
- 7 MS. SNEIDER: Well, our own witnesses have done the
- 8 exhaustive study. They've looked at virtually every building
- 9 listed in the beach area. And I think our own direct testimony
- 10 speaks to that.
- JUDGE SMITH: All right.
- MS. SNEIDER: I'm trying to get some indication now
- 13 from the state what criteria they will use in selecting
- 14 shelters, whether they think it would be advisable for people
- 15 to shelter in these buildings. And that really is the purposa
- 16 of this line of cross-examination.
- 17 MR. LEWALD: Your Honor, we would be glad to try and
- 18 enter into a stipulation, but something like this we can't
- 19 stipulate to. The photography, obviously, in a silhouette form
- 20 like this is not designed to show what's there; designed to
- 21 hide what's there. And if you're trying to take a picture of a
- 22 building you don't do it in silhouette form.
- 23 And we just can't use the slide, no one knows where
- 24 it is.
- MS. SNEIDER: Your Honor, there was no intention at

- 1 all to hide what's in this slide.
- 2 JUDGE SMITH: No, that's not the point. It's just
- 3 that we don't see, looking down the road to your approach as it
- 4 stands right now, we don't see anything reliable, probative,
- 5 and substantial evidence coming out the other end as you stand
- 6 here right now. But go ahead. Well, take more time on that
- 7 item.
- BY MS. SNEIDER:
- 9 Q Mr. Bell, can I just ask you how many buildings or
- 10 what percentage of the buildings in your original survey you
- 11 did exclude in your final list of shelters?
- MR. LEWALD: Point of clarification here, original
- 13 survey, are you referring -- I assume you're referring to the
- 14 March 1986 --
- MS. SNEIDER: Well, his comprehensive survey of all
- 16 potential shelter space. I think the witness testified that
- 17 they went and got tax assessor's cards for every building in
- 18 the beach area, and then they excluded some as being unsuitable
- 19 for shelter.
- 20 THE WITNESS: (Bell) What study are you referring to
- 21 when you say, original study?
- 22 BY MS. SNEIDER:
- 23 Q I'm referring to your more recent study, Revision 1
- 24 of the Stone & Webster study?
- 25 A (Bell) Okay. Now, what are you asking about the

- 1 Revision 1, August '87 Stone & Webster study, please?
- 2 Q I believe it's your testimony that you compiled the
- 3 list of all the potential shelters in the beach area, and that
- 4 a few of those buildings or some number of those buildings you
- 5 did exclude from your final list of potential shelters because
- 6 those buildings did not meet the criteria for sheltering
- 7 established in that study; is that right?
- 8 A (Bell) I did not exclude them; another person with
- 9 the qualifications to make a better judgment excluded them.
- 10 And the number is in the range of, perhaps, 10 to 20 in the
- 11 entire coastline from Plum Island up to Rye.
- 12 Q Okay.
- 13 A (Bell) Incidentally, besides the tax assessor's
- 14 records there are buildings there that, either the tax
- 15 assessor's record was unavailable because someone was using it
- 16 and it wasn't in the file, and in the field study we found the
- 17 building. In some cases we had to estimate the dimensions
- 18 rather than use tax assessors. So when you said earlier, you
- 19 took only the tax assessor's record, I just want to make that
- 20 clear that we didn't eliminate buildings because they weren't
- 21 on the tax assessor's records.
- 22 Q Dr. Wallace, do you think it would be advisable for
- 23 people to shelter in buildings with predominantly -- in which a
- 24 large portion of the walls are glass?
- 25 A (Wallace) Well, looking at the slide on this one

- 1 there's no way I can tell the size of the building or anything
- 2 about the building other than the front looks ....e it's glass.
- 3 In general, more protection is achieved cy being
- 4 farther away from the glass, glass portions. There's no way
- 5 you can tell this from that at all.
- 6 And in the final analysis, ideally you would not have
- 7 somebody in the front of the glass portion, but if that's all
- 8 you had that's what you'd use.
- 9 Q Okay. Is this slide a little clearer?
- 10 MR DIGNAN: How much of the buildings are cut off?
- MS. SNEIDER: Approximately a third.
- 12 BY MS SNEIDER:
- 13 Q Do you recognize this building as Mac's Clam Bar in
- 14 Seabrook Beach?
- 15 A (Bell) No.
- 16 Q Dr. Wallace, -- no, Mr. Bell, Mac's Clam Bar in
- 17 Seabrook Beach is included in Stone & Webster's list of
- 18 potential shelters; is that correct?
- 19 A (Bell) That's correct.
- 20 Q Does anybody on the panel recognize this building as
- 21 Mac's Clam Bar in Seabrook Beach?
- 22 A (Callendrello) I don't. I don't see anybody else on
- 23 the panel who's saying they recognize it.
- 24 A (MacDonald) I know where Mac's Clam Bar is, but I
- 25 have never seen it from that angle, so I can't say that that's

- 1 it.
- 2 JUDGE SMITH: Is it Mac's Clam Bar?
- 3 MS. SNEIDER: I can represent and I can have my own
- 4 witnesses identify that.
- 5 JUDGE SMITH: Well, if you know that it's Mac's Clam
- 6 Bar.
- 7 THE WITNESS: (Bell) Is that sign centered in the
- 8 side of that building?
- 9 MS. SNEIDER: The sign is over a takeout counter
- 10 which is on the left side of the building.
- JUDGE SMITH: Well, let's go ahead and assume that
- 12 it's Mac's Clam Bar.
- MS. SNEIDER: Okay.
- MR. DIGNAN: Well, it's two-thirds of Mac's Clam Bar.
- 15 And boy, would I like to know what the side of the back third
- 16 looks like, if there is a back third.
- 17 MS. SNEIDER: That one-third is takeout counter and
- 18 kitchen, I'm willing to represent.
- MR. DIGNAN: Just as much glass? Excuse me, Ms.
- 20 Sneider, and just as much glass on that back third?
- MS. SNEIDER: No. I don't think so. On the front
- 22 side of the building there's just as much glass, not on the
- 23 back side of the building in the kitchen area.
- MR. DIGNAN: Well, that's cut off, isn't it. Isn't
- 25 that the front ' looking at? The side or what?

Heritage Reporting Corporation (202) 628-4888

1	MS. SNEIDER: I don't understand.
2	MR. DIGNAN: What I'm talking about is, one witness
3	has already answered on this record that he couldn't answer
4	your questions because all he could tell was there was glass i
5	the front and he couldn't tell how deep the building was.
6	Now, you put a slide up there and already told us
7	one-third of the building is cut off. Now, the building is
8	obviously surrounded in glass on three sides, on what I gather
9	is the front.
10	Now, what I want to know is: what's on the back, if
11	we're going to start questions about whether that's a suitable
12	building? Or otherwise, Your Honor, I'm going t object on th
13	grounds that the photograph is not a fair repr . tation in
14	these circumstances where we're apparently gr ing to talk about
15	suitability for shelter.
16	MS. SNEIDER: What amount of shelter space or
17	potential shelter space or available shelter space was
18	calculated from the total square footage which includes this
19	part of this building.
20	JUDGE SMITH: Do you have Mac's Clam Bar records
21	there which would support that? Do you have a support for the
22	fact that this building, that credit was taken for the entire
23	floor area?

25

24

et/61

(Continued on next page.)

- 1 MS. SNEIDER: I'm not sure that credit was taken for
- 2 completely the entire floor area. Part of my contention is
- 3 people on the beach area don't know what portion of the floor
- 4 area Stone & Webster took credit for. When they're instructed
- 5 to go indoors, they are going indoors no matter what Stone &
- 6 Webster has listed.
- 7 JUDGE SMITH: All right. When they get in there,
- 8 what are they going to do?
- 9 MS. SNEIDER: And I'm asking if this would be a
- 10 suitable place for them to go in doors.
- Now the part that's in this photograph is the dining
- 12 area and the porch attached. It's my understanding the porch
- 13 attached was not included as space, but that there is no
- 14 division in the interior from the porch to the dining area;
- 15 that it's free flowing between the porch and the dining -- it's
- 16 not closed off inside.
- 17 If it would help, I have a photograph that shows a
- 18 little more of the building.
- 19 BY MS. SNEIDER:
- 20 Q Dr. Wallace, do you think it would be advisable for
- 21 people to shelter in this portion of the building that we can
- 22 see here?
- JUDGE SMITH: Would your answer be the same as to
- 24 any --
- THE WITNESS: (Wallace) My answer is essentially the

- 1 same as to the previous question.
- 2 JUDGE SMITH: Does that satisfy you?
- 3 MS. SNEIDER: Yes.
- 4 JUDGE SMITH: Ditto? Same question, same answer?
- 5 We're looking at a small building with a lot of glass
- 6 in the front of it. What's it called?
- 7 MS. SNEIDER: Pace Video and Laundromat. I think
- 8 it's the Scrub-a-Dub Lau-dromat which is included as a
- 9 potential shelter in Hampton Beach.
- 10 JUDGE SMITH: And it could be a decontamination right
- 11 there.
- 12 (Laughter.)
- 13 JUDGE SMITH: Were you going to ask the same
- 14 question, same answer?
- MS. SNEIDER: Well, one more question.
- 16 JUDGE SMITH: All right.
- 17 BY MS. SNEIDER:
- 18 Q If you turn to the shelter survey form -- I mean not
- 19 the -- Stone & Webster shelter survey, Dr. Bell, I believe it
- 20 indicates there's 1200 square feet there which reduced by
- 21 two-thirds would leave 400 square feet, which would then by
- 22 your calculations provide shelter for 40 people; is that
- 23 correct?
- 24 A (Callendrello) Where is that in the Stone & Webster
- 25 study?

- I think I've got it. Is that 703 Ocean Boulevard?
- 2 Q It's the Scrub-a-Dub.
- 3 A (Callendrello) Oh, there it is; we've got it. 536
- 4 High Street. I've got it.
- 5 The number of that's in Table 4 of our Exhibit 2,
- 6 Page 15 of 16. It's 1200 square feet which, of course, is the
- 7 gross area, and that would be reduced by the availability
- 8 factor which in this case -- Mr. Bell would have to answer what
- 9 the availability factor was that we have seen.
- 10 A (Bell) Well, if it indeed as you say, availability
- 11 factor of one-third, then that would be 400 square feet
- 12 potential shelter space. You divide by 10 square feet per
- 13 person. That would be 40 people.
- I can't tell by looking at that building whether 40
- 15 people could be in there and reasonably away from the glass or
- 16 not.
- 17 Q Well, I guess that was exactly what my question would
- 18 be. Do you think 40 people could fit in there and not be
- 19 standing right up next to that glass?
- 20 A (Bell) I can't tell by looking at that photo.
- 21 Q You did recognize that that might be a problem from
- 22 looking at that photo?
- 23 MR. LEWALD: Objection.
- 24 THE WITNESS: (Bell) Not with my part of the study.
- JUDGE SMITH: What's the basis of your objection?

Heritage Reporting Corporation (202) 628-4888

- 1 MR. LEWALD: The question was do you recognize that
- 2 that might be a problem looking at that photo. I submit that
- 3 that has no relevancy to anything in the record. That that
- 4 might be a problem looking at that photo.
- 5 JUDGE SMITH: Is there any avent --
- 6 MR. LEWALD: That photo isn't even a fair
- 7 representation of the building according to the witnesses.
- BY MS. SNEIDER:
- 9 Q Do you think that's a fair representation of the
- 10 Scrub-a-Dub Laurdry, Pace Video building?
- 11 A (Bell) It doesn't show me the depth of the building
- 12 there, so I can't evaluate it.
- And as I said I looked at tax assessor records and
- 14 looked at the buildings and applied availability factors. The
- 15 other person from Stone & Webster looked at those buildings and
- 16 evaluated whether or not that available shelter space was
- 17 reasonable. So I can't judge that, especially from this photo.
- MR. TUFK: Your Honor, one thir I would note from my
- 19 perspective across the room from the photo in terms of depth,
- 20 there's an automobile in the foreground of the slide which
- 21 appears to be a compact, intermediate-sized, which I presume is
- 22 something like 10 feet long.
- 23 If I'm correct, and the scale looks to be like the
- 24 front of the building is approximately three intermediate car
- 25 lengths, approximately 30 feet.

- If the tax assessor's right that it's 1200 feet
- 2 square, that means it's 40 feet deep. This picture doesn't
- 3 show you anything of that depth.
- 4 MS. SNEIDER: Your Honor, I can get the tax
- 5 assessor's card.
- 6 JUDGE SMITH: I just don't want to go that way. You
- 7 know, looking at this picture I would say there are aspects of
- 8 that building, because of the large glass front, unusually
- 9 large in my normal experience as to a typical building, that
- 10 might bring into question whether the 40 people could fit in.
- I would also imagine that somewhere in those shelters
- 12 are other buildings in which the 10 square feet would be very
- 13 conservative. I don't know. I just don't think we ought to
- 14 have a big litigation on particular buildings.
- MS. SNEIDER: Okay.
- 16 JUDGE SMITH: And I think we've spent a fair amount
- 17 of time on this, and I think that the Board is straining its
- 18 patience.
- MS. SNEIDER: Why don't we go to the next one.
- 20 JUDGE SMITH: Another glass building, right? Same
- 21 thing, same --
- MR. DIGNAN: How much of this again?
- JUDGE SMITH: Are you going to have any slides there
- 24 that show buildings with little, tiny windows?
- MS. SNEIDER: There's not a whole lot of them in the

- 1 beach area. It's a summer resort area that tends -- on the
- 2 ocean that tends to lots of glass and open areas.
- 3 JUDGE SMITH: All right. So this is where you're
- 4 going. Let's find out where you're going.
- 5 Are you saying then that a basic fallacy in the study
- 6 is that the buildings tend to have large, glass areas? Is
- 7 that --
- MS. SNEIDER: And large areas, large amount of areas
- 9 open to the -- directly open to the outdoors.
- 10 JUDGE SMITH: Okay, and you're going to do it by
- 11 showing individual slides? Are you going to quantify it any
- 12 other way, any more structured way?
- MS. SNEIDER: Yes, I have other ways to quantify it,
- 14 and I want to -- I'm interested in getting the state's
- 15 evaluation of whether these buildings would be suitable for
- 16 shelter.
- JUDGE SMITH: Okay, what do we see on this one now?
- We see a lot of glass around the perimeter of the
- 19 building. That's a one-story building. And this one we see is
- 20 up on piles. Does that have anything to do with --
- 21 BY MS. SNEIDER:
- 22 Q Yes, I wanted to ask Dr. Wallace if the fact that
- 23 water comes underneath this building --
- MR. EWALD: Your Honor, could we allow Mr.
- 25 MacDonald, who is the health physicist, to come around so he

- 1 can look at these pictures? He's sitting behind the screen.
- 2 JUDGE SMITH: Whatever he wishes.
- 3 BY MS. SNEIDER:
- 4 Q Can anyone on the panel, to begin with, identify this
- 5 building?
- 6 A (Callendrello) That's Brown's Lobster Fad on Route
- 7 286 in Seabrook.
- 8 Q Okay.
- 9 A (Callendrello) As my colleague indicated, it is a
- 10 portion of it, at least I don't see portions that include, for
- 11 example, the kitchen, takeout area.
- 12 Q Excuse me, I can't hear you.
- 13 A (Callendrello) It doesn't include portions that I'm
- 14 familiar with, and that is the kitchen and takeout area.
- JUDGE SMITH: Well, as I look at it, I disagree with
- 16 you this time. To the extent that a two-dimensional photograph
- 17 can capture any three-dimensional, it's complete, because I
- 18 think that it's a complete -- of the face of the building that
- 19 is showing, the two faces of the building that is showing.
- 20 THE WITNESS: (Callendrello) Well, what I'm saying,
- 21 if you look at it from the other end, you can see the kitchen.
- MS. SNEIDER: We did have that first one.
- 23 THE WITNESS: (Bell) As I remember this building,
- 24 that end of it is a dining area; probably has picnic benches
- 25 inside. I can't be sure. But I think those are screens.

The base of the property of th		MS.	SNEI	DER:	Yes.
--	--	-----	------	------	------

- THE WITNESS: (Bell) And we did not include that
- 3 space as potential shelter space; only the solid building at
- 4 the other end, which you can see the very tip of the roof of,
- 5 was included as potential shelter space for that facility.
- 6 BY MS. SNEIDER:
- 7 Q Now, as you remember that building, is there any --
- 8 is the interior space closed off in any way from the screened
- 9 in portion of the building?
- 10 A (Bell) I did not go inside the building, so I can't
- 11 answer that.
- 12 Q And are the people in the beach area going to know
- 13 that there is only certain portions of the building they 're
- 14 supposed to go into as opposed to other portions of the
- 15 building?
- 16 Could you answer that, anyone from the state?
- 17 A (Bonds) There are no EBS messages yet in place
- 18 dealing with sheltering of the beach population. So there is
- 19 no answer to that question.
- 20 Q Now I have a question regarding the fact that this
- 21 building is on stilts.
- 22 If there is a release of radiation involving
- 23 particulate release of radiation with deposition of particles
- 24 on the ground, wouldn't you get more exposure from ground shine
- 25 as a result of this building being on stilts?

- 1 A (MacDonald) Well, what you have got to do is get
- 2 the radioactive material in the particulate form underneath the
- 3 building.
- 4 Are you postulating that as well?
- 5 Q Excuse me?
- 6 A (MacDonald) Are you postulating that we get the
- 7 radioactive material underneath the building?
- 8 Q I'm not postulating where it would go except on the
- 9 ground.
- MR. FLYNN: Your Honor, I suggest that the question
- 11 is irrelevant. If the building is not included in the survey
- 12 as potential shelter, then the additional fact that there
- 13 might --
- MS. SNEIDER: The building is in the survey.
- MR. FLYNN: Well, the portion that's on stilts isn't.
- JUDGE SMITH: Well, the building -- the part that is
- 17 not a porch is included, as I understand it.
- But withholding the postulation, are you able to
- 19 answer the question since she would not postulate anything
- 20 particular about a particular matter under the building?
- MR. LEWALD: Your Honor, could we hear the question
- 22 again? I don't think the witness understood really what the
- 23 question was.
- JUDGE SMITH: I thought he did quite well, but let's
- 25 have it back.

- 1 MR. LEWALD: Well, we was doing quite well as to what
- 2 the question might have been, but I'm not sure he was doing all
- 3 that well with what the question actually was, because he was
- 4 asking whether she was postulating things in the question which
- 5 he didn't --
- 6 JUDGE SMITH: Yes, he needed a postulation before the
- 7 question made sense to him, and she declined to make such a
- 8 postulation. Therefore, the question is back to him without
- 9 the postulation.
- MR. LEWALD: And it's this question that I would like
- 11 to have put again to the witness. I'm not sure he now
- 12 understands it.
- 13 JUDGE SMITH: All right.
- MR. LEWALD: I don't think I understand it now.
- JUDGE SMITH: Let me make a crack at the question as
- 16 it remains.
- You will note that this building, she says, is up on
- 18 stilts, piles.
- 19 THE WITNESS: (MacDonald) Correct.
- 20 JUDGE SMITH: Does this give you a problem then if
- 21 people seek that for shelter for ground shine?
- 22 And you say, oh, it only depends whether you
- 23 postulate particulate matter under the building.
- 24 And then she says, I decline to postulate that.
- THE WITNESS: (MacDonald) Therefore, I can't answer.

- JUDGE SMITH: All right.
- JUDGE LINENBERGER: If I may make an observation, it
- 3 would appear that the floor elevation of the building is closer
- 4 to the ground at one end than it is at the other. So that that
- 5 makes it even more difficult to assess a meaningful answer to
- 6 counsel's question as far as I can see.
- 7 THE WITNESS: (MacDonald) Another complicating
- 8 feature of that particular building if the tide comes in.
- 9 MS. SNEIDER: Okay.
- 10 PY MS. SNEIDER:
- 11 Q Wall, might iodine deposit more easily on damp
- 12 surfaces?
- MR. TURK: Could I hear that again?
- 14 THE WITNESS: (MacDonald) Could iodine deposit more
- 15 easily on damp surfaces?
- Deposition of icdine is going to be a function of the
- 17 form that the iodine is in the cloud, and the meteorological
- 18 conditions; whether there is precipitation in the cloud area or
- 19 not. And deposition on a surface, to my knowledge, doesn't
- 20 matter -- what comes out of the sky -- doesn't matter whether
- 21 the surface is wet or dry.
- 22 BY MS. SNEIDER:
- 23 Q Are you able to identify these cottages as the Helm
- 24 cottages?
- 25 A (Bell) No.

- 1 Q Well, assume as -- I'd like to just represent to you
- 2 that according to the Stone & Webster survey calculation of
- 3 shelter space that 14 people could potentially shelter in each
- 4 one of these cottages.
- 5 And my question for the state is --
- 6 A (Callendrello) Could you just please give me the
- 7 reference for that?
- 8 Q It's the Helm cottages.
- 9 A (Callendrello) And in what town is that? I'm sorry.
- 10 Q It's in Hampton. And that includes four cottages and
- 11 a mair, building.
- MR. LEWALD: Could we have the address of this
- 13 building, where it is? These representations as to what the
- 14 building may or may not be able --
- MS. SNEIDER: 13 G Street.
- MR. LEWALD: -- are meaningless unless we know what
- 17 we're talking about by way of the structure.
- MS. SNEIDER: Excuse me. It's on 13 G Street, in
- 19 Hampton.
- 20 MR. LEWALD: And looking at what part of the
- 21 building, the front or the back, or is that two buildings --
- MS. SNEIDER: We're looking at the front of two of
- 23 the four cottages that are part of that building. And it's No.
- 24 116 on the Stone & Webster survey list.

25

1	BY	MS.	SNET	DER:
A	20.8	145.02	Aut & William Admin	distributed to

- 2 Q And my question for the state is, do you think the
- 3 owner of these cottages is likely to go outdoors in a release
- 4 to let the 14 people into each of these cottages?
- 5 A (Wallace) I have no idea.
- 6 JUDGE SMITH: If he does, he'd better not charge
- 7 them.
- 8 (Laughter)
- 9 BY MS. SNEIDER:
- 10 Q Now showing you a series of slides which you may
- 11 recognize as the Hampton Beach fire station garage which is
- 12 listed as a potential shelter on the Stone & Webster shelter
- 13 survey form.
- And does anyone on the panel recognize this building?
- 15 A (Callendrello) I don't, no.
- 16 A (Bell) No.
- MR. TURK: That's an interior shot, isn't it? It's
- 18 hard to tell from where I am.
- JUDGE SMITH: That's an interior shot with a large
- 20 truck blocking the open, the large garage door, isn't it?
- MS. SNEIDER: Yes, and the first shot was the shot of
- 22 the door, if you want to go back.
- 23 JUDGE SMITH: That's the door closed.
- MS. SNEIDER: Right.
- 25 THE WITNESS: (Callendrallo) Is there another door

- 1 on the other side? Is that what I'm seeing, one side of the
- 2 door, or one door of a two-door opening?
- 3 MS. SNEIDER: This is the front door to the building.
- 4 THE WITNESS: (Bell) Is that the truck parked square
- 5 in front of it?
- 6 THE WITNESS: (MacDonald) Is this front door to the
- 7 Hampton Beach precinct fire station? Is that what you're
- 8 saying?
- 9 MS. SNEIDER: The garage which is the area of the
- 10 fire station that's listed as potential shelter space.
- 11 THE WITNESS: (MacDonald) Fire station garage, not
- 12 the fire station.
- MS. SNEIDER: No, it's the fire station garage that's
- 14 on the list.
- JUDGE SMITH: So we're looking at a door here that is
- 16 ill-fitting and there is perhaps a six-inch crack at the bottom
- 17 and an inch or so where it doesn't meet and an inch or so at
- 18 the top where the doors don't come up all the way to the top.
- 19 It's a loose-fitting woor.
- 20 MS. SNEIDER: I want to go on to the next one.
- 21 MR. TURK: Your Honor, I would note that there is no
- 22 way we can tell from this picture whether that door is in its
- 23 fully closed position. That simply happened to be the
- 24 condition when the photograph was taken.
- JUDGE SMITH: Well, you always go back to that. I

- 1 thought that's pretty obvious that this is a door that
- 2 doesn't --
- 3 MR. TURK: My point is at the bottom of the door
- 4 where Your Honor noted a six-inch, or approximately a six-inch
- 5 gap, we don't know whether the door has been lowered to its
- 6 complete down position.
- 7 JUDGE SMITH: That slides horizontally and meets, I
- 8 think.
- 9 MS. WEISS: I assume that's something that the NRC
- 10 staff will investigate.
- MR. TURK: Ellyn, I'll take you with me. We'll go
- 12 out this week and take a look.
- MS. WEISS: Would you investigate that, because we
- 14 want to check this shelter study out. You're checking this
- 15 out, right?
- JUDGE SMITH: Well, why are you showing this door?
- MS. SNEIDER: Okay, and -- why don't we go on to the
- 18 third one.
- 19 BY MS. SNEIDER:
- 20 Q Would you agree that the slide indicates other areas,
- 21 aside from that door, that are not tight to the outdoors with
- 22 the lights coming in the building?
- 23 A (Callendrello) Are you talking about where the roof
- 24 line meets the masonry wall?
- 25 Q Where the roof line meets the walls.

Heritage Reporting Corporation (202) 628-4888

## PANEL NO. 6 - CROSS

1	A (Callendrello) I can see light coming through
2	there, yes.
3	Q And going on to the next slide, it's the exterior of
4	the building. I believe you can see where windows aren't in
5	place?
6	A (Callendrello) All I can see is that there is a
7	window open. I don't know if the window is missing or if it's
8	simply opened. But there is an open space at the top of that
9	double window.
10	Q Okay. Dr. Wallace, my question for the state is, do
11	you think it would be advisable suitable shelter that this
12	building with its opening to the outdoors would provide
13	suitable shelter in a radiological emergency?
14	A (Wallace) Certainly large portions of it would as I
15	look at it as represented by the pictures. I would certainly
16	need to consult with my health physicist people, but a lot of
17	the area that you showed in there would be suitable shelter.
18	Q So the fact that air could come in quite easily from
19	the outside wouldn't affect its suitability as a shelter?
20	(Continued on next page.)
21	
22	
23	
24	
25	

E62

- 63
- 1 JUDGE SMITH: I assume by suitability, which you're
- 2 talking about here, is whether to afford dose reductions; is
- 3 that how you understand the question?
- 4 MS. SNEIDER: Well, mine is whether it would afford
- 5 adequate protection, and whether it meet the .9 criteria.
- 6 MR. BISBEE: Could I -- she referred to two different
- 7 standards, adequate and whether it meets the . 9 DRF. Is
- 8 that -- is it the latter point that we're addressing now?
- 9 MS. SNEIDER: Well, there's also another point. As I
- 10 understand it the state has assigned a factor of two-air-
- 11 exchange rates -- two-air-exchanges per hour in calculating
- 12 thyroid dose, and does it also meet that criteria of buildings
- 13 or are these openings to the outdoors.
- MR. BISBEE: Again to clarify it, are we first asking
- 15 whether it meets the .9 dose reduction factor standard; and
- 16 then asking whether the two-air-exchange standard is also met
- 17 here?
- MS. SNEIDER: If that's Dr. Wallace's definition of
- 19 suitable.
- 20 BY MS. SNEIDER:
- 21 Q In your opinion, would it meet that .9 dose reduction
- 22 factor criteria?
- 23 A (Wallace) What you showed me in the picture, yes, it
- 24 would certainly meet the .9.
- 25 Q And what about the two-air-exchanges per hour?

- 1 A (Wallace) If I could ask Mr. MacDonald to deal with
- 2 that part of it.
- 3 A (MacDonald) We have to deal with the idea of
- 4 bringing outside air into the building in order for there to be
- 5 a concern internal in the building to any people that are in
- 6 there at the time. And from these openings and the openings on
- 7 the doors on the other slides that you showed, they're not
- 9 large enough without a driving force of concern. They're not
- 9 large enough to threaten that two-air-exchanges per hour, for
- 10 example.
- 11 So that even from an internal exposure standpoint,
- 12 even though there's an opening here I assume that's a window
- 13 that could be closed, and those door openings that were ill-
- 14 fitting there's no driving force, especially in the summer, for
- 15 air to go from the outside to the inside of the building.
- So I don't have a sense that there's a large air
- 17 exchange rate.
- 18 Q Excuse me. If you assume that the window cannot be
- 19 closed, would that change what you just told me?
- 20 A (MacDonald) Even with that wide open window there,
- 21 what I assume is either the back or the side of the building,
- 22 and we saw from the other slides that its a very large
- 23 building, so we're not dealing with people that are standing
- 24 next to that window, then we have to have a driving force.
- 25 There has to be a delta something, delta pressure in order for

- 1 air to be forced inside that window from the outside.
- In the winter with the heating system which that
- 3 building didn't look like it had a heating system, of course,
- 4 we're dealing with a summer situation, so a heating system even
- 5 if it had one in that building wouldn't be on. We're not
- 6 drawing -- you're not deliberately drawing outside air in
- 7 through any opening including that window.
- 8 Q Okay. Now, if you're allotting 10 square feet per
- 9 rerson there would be some people standing next to the windows
- 10 or the door, isn't that the case?
- 11 A (MacDonald) I don't know how the calculations ended
- 12 up for this building on the list.
- 13 A (Callendrello) We'll check that. There was, of
- 14 course, an availability factor applied to the gross square
- 15 footage to come up with available square footage. If you can
- 16 just hold on one second we'll get that number.
- 17 Yes, it was a 50 percent availability, so the Stone &
- 18 Webster shelter study indicated potential shelter space of --
- 19 A (Bell) We took off 80 percent first, and then we
- 20 took half of that. We took off 80 percent of the building and
- 21 then took half of that.
- 22 A (Callendrello) We used 80 percent.
- 23 A (Bell) So we essentially used 40 percent of the
- 24 total floor space in that building.
- 25 A (Callendrello) We used, of the gross --

- 1 MR. LEWALD: What's the question, I don't know that
- 2 there is a question.
- 3 JUDGE SMITH: I don't know with this chatting going
- 4 on.
- 5 BY MS. SNEIDER:
- 6 Q The question was, whether people using 10 square feet
- 7 per person, wouldn't it be likely that people would be standing
- 8 next to the windows or the garage door?
- 9 A (Callendrello) I would say that the answer is, no.
- 10 JUDGE SMITH: And that's because of the small amount
- 11 of credit taken for the total floor space?
- 12 THE WITNESS: (Callendrello) Yes. Looking at a
- 13 straight square footage chance; yes.
- 14 BY MS. SNEIDER:
- 15 Q Excuse me, it appears that you reduce the space by 20
- 16 percent, leaving 80 percent of the -- you counted 80 percent of
- 17 the square footage?
- 18 A (Bell) And then took half of that. So it's only
- 19 40 -- the availabi: ity factor is one-half.
- 20 Q Okay.
- 21 A (Beil) So we took one-half of the 80 percent which
- 22 is 40 percent of the total space of the building.
- JUDGE SMITH: And you gave every person 10 square
- 24 feet?
- THE WITNESS: (Bell) Of that 40 percent, yes.

- 1 BY MS. SNEIDER:
- 2 Q And the space is reduced because of the large amount
- 3 of stored items in the building; is that correct?
- 4 A (Bell) That's what the availability factor was
- 5 intended to take care of, yes.
- 6 Q Does anybody on the panel recognize this building as
- 7 one of the cottages called the McNeil Cottages -- O'Neill
- 8 Cottages on Gooken Court in Hampton?
- 9 A (Bell) No.
- 10 Q I'd like to point out the louver window on the right
- 11 and then we have a closeup of another louver window on this
- 12 cottage. And I'd like to know, Mr. Bell, are you aware of the
- 13 prevalence of these louver windows in the beach area?
- 14 A (Bell) No, I'm not aware of the prevalence of those
- 15 windows in the beach area.
- MR. DIGNAN: Did the witnesses confirm that they
- 17 recognized this?
- 18 THE WITNESS: (Bell) No.
- 19 MR. DIGNAN: They don't. Are you representing that
- 20 this building is on Gooken Court?
- MS. SNEIDER: And it's called O'Neil Cottages which
- 22 is -- and that it's -- and that the O'Neil Cottages on Gooken
- 23 Court are some of the potential shelters on the St e & Webster
- 24 shelter survey form.
- MR. DIGNAN: And Gooken Court exists?

- 1 MS. SNEIDER: Yes.
- 2 MR. DIGNAN: The witnesses haven't testified it
- 3 doesn't.
- 4 BY MS. SNEIDER:
- 5 Q Dr. Wallace, do you think windows of this sort would
- 6 affect the air exchange rate in a small cottage?
- 7 MR. LEWALD: I'm going to object to that question.
- 8 If this representation is that that photograph is showing a
- 9 window, then I've got a bad angle.
- 10 MS. SNEIDER: We first showed the window face on, and
- 11 this was the best way we could see to photograph this window to
- 12 show the difficulty in closing this type of window.
- JUDGE SMITH: Where she's going now -- what was the
- 14 answer to the question, after recognizing that this is a louver
- 15 window -- does the witness recognize the prevalence of this
- 16 type of window in the beach area, and what was the answer to
- 17 that, that's when we got an interruption?
- MS. SNEIDER: No, this witness doesn't. I believe
- 19 there is other testimony coming in that does speak to that.
- JUDGE SMITH: Okay. Then the question is -- where
- 21 you're going then is, if this is the case the exchange rate is
- 22 going to be underestimated, is that --
- MS. SNEIDER: Yes. Well, there's testimony from the
- 24 state that says, virtually any building in the beach area would
- 25 have an air exchange rate of two per hour, something to that

- 1 effect. And I want to ask the witness' opinion as to whether
- 2 -- assuming this type of windows in small cottages, would that
- 3 have any impact on the air exchange rate.
- 4 THE WITNESS: (MacDonald) Well, the first impact on
- 5 an air exchange rate with a window like this is, close it to
- 6 eliminate --
- 7 BY MS. SNEIDER:
- 8 Q This is in the middle of the winter, this is as much
- 9 as this window can be closed?
- 10 A (MacDonald) All right. So you're representing
- 11 that's a permanent fixture like that. Okay. Now, in a summer
- 12 situation that cottage is very hot. So there is -- they would
- 13 love air to come from the outside because it's going to be
- 14 cooler to cool that cottage off, but what happens on a hot
- 15 summer day is that the cottage heats up because of a roof or
- 16 whatever it is, and the air actually moves out of that window
- 17 from the inside to the outside, not from the outside to the
- 18 inside.
- 19 There's no driving force to draw air in through that
- 20 window. If there's a fan, you shut the fan off. If there's
- 21 an air conditioner, and I don't expect that those cottages
- 22 would have an air conditioner especially with a blocked open
- 23 window.
- 24 Q So do you think it would be advisable for people then
- 25 to keep the windows open?

- 1 A (MacDonald) If there's no choice, that window does
- 2 not close and that's included in the shelter survey and the
- 3 state ends up using that facility as a shelter for the
- 4 beachgoers, then there's no choice.
- But what I'm saying is, that doesn't mean that the
- 6 air exchange rates per hour is violated.
- 7 MR. TURK: Your Honor, I'm not sure, maybe I'm not
- 8 capable of seeing the slide from this distance, but to me it
- 9 looks like that window is in a half open position. And I heard
- 10 Ms. Sneider say that that's the most that window can be closed
- in the winter. I don't know if there's any evidence about
- 12 that. I don't know if someone has tested that window and seen
- 13 if it's broken or what the closure possibility is.
- 14 MR. DIGNAN: Your Honor --
- JUDGE SMITH: This depict -- the idea is -- I'm
- 16 talking --
- 17 MR. LEWALD: It's the beach population that's being
- 18 talked about, not the win'ertime population.
- JUDGE SMITH: Is that where you're going? Is this
- 20 unsuitable for winter, is that where you're going?
- MS. SNEIDER: No, I never intended to get into
- 22 winter. The witness suggested that the window could be closed,
- 23 and my suggestion was that it was wintertime. We looked at a
- 24 number of these windows in the beach area, in the wintertime
- 25 they were open.

- 1 MR. TURK: Well, how do we know that someone just
- 2 didn't leave them open.
- 3 MS. SNEIDER: Well, there's other testimony in the
- 4 case about the difficulty --
- 5 JUDGE SMITH: Back up, let me talk. Well, we're
- 6 talking now about sheltering the beach population in the
- 7 summer, and you're going to put on a witness that's going to
- 8 say, a lot of these cottages have louvered windows. And you're
- 9 going to get -- you're trying to get the panel to say, well,
- 10 louver windows are not consistent with their estimate of the
- 11 exchange rate. So this witness said, well, it doesn't degrade
- 12 the -- I mean, it doesn't change the exchange rate because the
- 13 first movement is, the room heats up and air goes out.
- 14 Then I guess you're saying, and then you have
- 15 stability after that point or are you saying the roof heats up
- 16 and there's a driving force and you have more excharge, you
- 17 left it -- you sort of stopped at that point.
- 18 THE WITNESS: (MacDonald) Physically what happens
- 19 is, as the room heats up air starts moving out that window and
- 20 that continues as long as there's a hot summer day.
- 21 JUDGE SMITH: Well, so long as that continues, then
- 22 you have a driving force exchanging air in there.
- 23 THE WITNESS: (MacDonald) From inside to outside.
- JUDGE SMITH: Well, I see, sooner or later you're
- 25 either going to have --

- 1 THE WITNESS: (MacDonald) Well, yes, that's true.
- 2 There will be a makeup from somewhere. There will be other
- 3 openings somewhere around that facility and I have no idea
- 4 where that is.
- 5 MS. WEISS: Otherwise it'll implode.
- 5 JUDGE SMITH: Well, is it your testimony, whatever
- 7 the window opening is the heating air will eventually reach
- 8 stability or what, I don't know? Or is a louver situation like
- 9 this there will be a greater exchange, bearing in mind the
- 10 whatever goes out has to be replaced ultimately, do you still
- 11 stick with your testimony that the exchange rate would not vary
- 12 because of the fact that the windows are louvered?
- 13 THE WITNESS: (MacDonald) Now, the fact that it's
- 14 louvered doesn't matter; it just represents an opening. And
- 15 actually, that particular opening is so small, I'm not sure
- that there would be very much of an air exchange rate
- 17 whatsoever.
- And in an emergency situation part of the EBS message
- 19 that could be broadcasted would be to block out any opening
- 20 that existed in a facility like that.
- MS. SNEIDER: Excuse me?
- 22 THE WITNESS: (Strome) I think as a prudent matter
- 23 anyone who was involved in a situation like that would probably
- 24 tack up a trash bag or something like that over the opening.

- JUDGE HARBOUR: Excuse me. I'm bothered by your
- 2 explanations of the air exchange, doesn't the wind blow in this
- 3 beach area in the summertime?
- 4 THE WITNESS: (MacPonald) It certainly does and that
- 5 is the problem, actually.
- 6 JUDGE HARBOUR: The problem for what?
- 7 THE WITNESS: (MacDonald) Well, I mean, we're
- 8 postulating, obviously, here that there's a wind and it's
- 9 blowing from Seabrook Station two miles in land over these
- 10 kinds of -- these kinds of openings.
- JUDGE HARBOUR: Are you saying that this house
- 12 wouldn't have a pressure differential on one side compared to
- 13 the other side of the house as a result of the wind blowing?
- 14 THE WITNESS: (MacDonald) That would be the case,
- 15 that's true.
- JUDGE HARBOUR: What would be the case, there would
- 17 be a differential?
- 18 THE WITNESS: (MacDonald) There would be a
- 19 differential.
- JUDGE HARBOUR: And the opening would then have what
- 21 effect on air exchange rate?
- 22 THE WITNESS: (MacDonald) It would depend on where
- 23 the opening was in relation to the differential, and that could
- 24 be drawing air out of that opening or it could be forcing air
- 25 into that opening.

1	JUDGE SMITH: In either event there would be an
2	effect upon the exchange rate? Or as Ms. Weiss observed you're
3	going to have an
4	THE WITNESS: (MacDonald) That would be a dynamic
5	situation; that's true. And there would be some kind of air
6	exchange and an equilibrium established with the facility,
7	depending on how many openings there were, how many how much
8	volume of air was inside, what the temperature of the air was
9	inside, et cetera. It would be a very dynamic situation.
10	JUDGE SMITH: Well, isn't it given the situation,
11	likely to encounter the beach during the summer, which is
12	necessary, you've got to have the wind, you've got to have
13	heat, you've got to have all these things; isn't it more likely
1	than not that a house or a building or a shelter with more
1.5	openings is going to have a greater exchange rate than one with
16	good windows and less air openings, openings to the air?
17	THE WITNESS: (MacDonald) True.
18	JUDGE SMITH: True.
19	THE WITNESS: (Callendrello) Your Honor, there's one
20	assumption I think we've been asked to accept that I may not
21	I've got a little problem with and that is, because these
22	windows are open in the wintertime, that they can't be closed,
23	I know that's a very damp area and in some cases, obviously,
24	there's no plumbing system or else there would be a danger of
25	the pipes freezing and maybe to prevent mildew, in fact, those

- 1 windows may be able to be closed.
- 2 JUDGE SMITH: Yes, I would guess that they could be
- 3 closed, I think that's part of the design, isn't it, that
- 4 they'd be closed.
- 5 THE WITNESS: (Callendrello) Yes, it usually is.
- 6 BY MS. SNEIDER:
- 7 Q Is anybody on the panel aware of the difficulty in
- 8 closing louver windows tightly?
- 9 A (Bonds) Yes.
- 10 Q And one other question about the air exchange rate,
- 11 would the small size of a cottage affect air exchange rate,
- 12 make the -- more likely that the air exchange would be more
- 13 rapid?
- 14 A (MacDonald) You mean a smaller interior volume?
- 15 Q Right?
- 16 A (MacDonald) Actual rate of exchange would depend on
- 17 the opening as well as the interior volume. So if you hold the
- 18 opening the same and you deal with a large volume and compare
- 19 that with a small volume, then the air exchange rate for the
- 20 small volume would be quicker.
- 21 Q So is your answer, yes?
- 22 A (MacDonald) Yes. Holding that opening size the
- 23 same, though.
- 24 Q And would a small cottage without interior walls
- 25 provide less shielding than, you know, a larger house with the

## PANEL NO. 6 - CROSS

1	normal interior walls from cloud shine or ground shine?
2	A (MacDonald) Well, the main shielding afforded
3	interior to a building from cloud shine is the roof. Interior
4	walls can help depending on the interior configuration. But
5	mainly, the principal shielding the principal shield is the
6	roof. I should say, roof and exterior walls.
7	Q Okay. So that a cottage that didn't have a ceiling
8	in it underneath the roof would provide less shielding from
9	cloud shine than one that did; is that correct?
10	A (MacDonald) A shielding with a cottage with less
11	mass between the individual inside the cottage and the cloud
12	outside the cottage would be less effective than situation
13	with more mass.
14	(Continued on next page.)
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

- 1 Q And that would be true for shielding from ground
- 2 shine also; am I right?
- 3 A (MacDonald) Shielding in general is a function of
- 4 how much mass of material is between the receptor and the
- 5 source of radiation.
- 6 MS. SNEIDER: Okay. I think I'm going to cut this
- 7 short with just one more slide.
- 3 JUDGE SMITH: You're showing a ventilating fan?
- 9 MS. SNEIDER: Yes, I am.
- 10 BY MS. SNEIDER:
- 11 Q Mr. Bell, have you been inside the ballroom of the
- 12 casino?
- 13 A (Bell) No, I have no.
- 14 Q Has anybody on the panel been inside the ballroom of
- 15 the casino?
- 16 A (Strome) Yes, about 30 years ago to dance to Guy
- 17 Lombardo.
- 18 A (Callendrello) I've been inside the ballroom of the
- 19 casino.
- 20 Q Would you agree that there is two fans of this nature
- 21 in the walls of the ballroom?
- 22 A (Strome) I can't recall.
- 23 A (Callendrello) I don't recall either.
- MS. SNEIDER: I'd like to represent for the purposes
- 25 of this cross right now, I believe there is testimony coming in

- 1 on this, that this is the interior -- a shot of a fan inside,
- 2 taken from the interior of the ballroom of the casino.
- 3 MR. TURK: May I ask, is that in the public area, or
- 4 is that between the ceiling and the rafters? What are we
- 5 looking at?
- 6 MS. SNEIDER: Ballroom.
- 7 MR. TURK: The room where people go.
- 8 MS. SNEIDER: Right.
- 9 BY MS. SNEIDER:
- 10 Q Now in this room of the casino, I believe, Mr. Bell,
- 11 Stone & Webster have provided that 1300 people could shelter in
- 12 this room.
- 13 A (Bell' Excuse me, we have not listed that number
- 14 specifically as such. So, therefore, it must be a calculation
- 15 of yours?
- 16 Q Well, it's based on the square footage that Stone &
- 17 Webster allotted for this room of the casino. Looking at that
- 18 shelter survey form that I gave you before, that was the square
- 19 footage of this room, and then giving it the reduction factors
- 20 that Stone & Webster used.
- 21 A (Callendrello) We'll take a minute and we'll get the
- 22 form and we can verify that.
- 23 We're not able to recreate that calculation right here
- 24 without the floor plan of the building.

- A (Bell) Was that calculation done using one-half 1 availability factor and the ballroom floor space multiplied 2 3 together, and then divided by 10 square feet per person? Yes, it was. 4 I can show you a floor plan if that would help you. 5 (Callendrello) Yes, it would. 6 From the tax assessor's card. Q JUDGE SMITH: Could we have lights now? 8 (Witnesses confer.) 9 THE WITNESS: (Bell) How many people did you say? 10 MS SNEIDER: Approximately 1300. 11 12 TH\_ WITNESS: (Bell) Approximately 1300. BY MS. SNEIDER: 13 And would those fans, large fans in the wall affect 14 the air exchange rates in those buildings, or in that room? 15 A (MacDonald) Well, that's deliberately forcing inside 16
- 20 Q Shut down?

be shut down.

- 21 A (MacDonald) Cut off.
- 22 Q Okay. But just the fact that there is that opening

air to the outside, meaning it's got to be made up from other

sources. So, yes. But for shelter purposes those fans would

23 to the outdoors, even if the fans are turned off, would that

24

17

18

19

- 1 affect the air exchange rate?
- 2 A (MacDonald) Well, then we're back to the other
- 3 discussion we had of the stuck-open louver opening, and it has
- 4 that kind of affect, but not a deliberate forced ventilation
- 5 effect if the fan is shut of.
- 6 Q Okay.
- 7 A (Callendrello) It's also a little difficult to
- 8 estimate that without knowing the size of that fan or the size
- 9 of that opening.
- 10 JUDGE SMITH: But certainly it's going to have an
- 11 effect, the fact that there is an opening there will have an
- 12 effect.
- 13 THE WITNESS: (Callendrello) Right.
- 14 JUDGE SMITH: We know nothing else about the room or
- 15 anything else, but that will have an affect.
- MS. SNEIDER: And we do know the size of the room.
- 17 JUDGE SMITH: And you don't know anything else about
- 18 what other openings there are or anything else. Just that we
- 19 thow up there at the peak we have a circle of about 18 inches,
- 20 12 inches or so with air coming out.
- MS. SNEIDER: No. larger than that.
- 22 JUDGE SMITH: Whatever.
- Do you want to break for lunch now?
- MS. SNEIDER: I think I'm finished.
- 25 JUDGE SMITH: With your cross-examination?

## PANEL NO. 6 - CROSS

1		MS. SNEIDER: Yes.
2		JUDGE SMITH: To the penel?
3		MS. SNEIDER: Yes.
4		JUDGE SMITH: Oh, fine.
5		Return at 1:10.
6		(Whereupon, at 11:56 a.m., the hearing was recessed,
7	to resume	at 1:10 p.m., this same day, Thursday, May 5, 1988.)
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

55	1	AFTERNOON SESSION
	2	(1:12 p.m.)
	3	MS. SNEIDER: Your Honor, just one brief thing, I'd
	4	like to move into evidence Commonwealth's Exhibits No. 16 and
	5	17; I realized I failed to do that this morning.
	6	MR. DIGNAN: Is there a motion to put something in
	7	evidence?
	8	JUDGE SMITH: Yes, 16 and 17.
	9	Are there objections?
	10	MR. DIGNAN: No. Your Honor.
	11	JUDGE SMITH: Massachusetts Attorney General 16 and
	12	17 are received.
	13	(The document referred to having
	14	been previously marked for
	15	identification as
	16	Massachusetts Attorney General
	17	Exhibits 16 and 17 were
	18	received in evidence.)
	19	MR. DIGNAN: Your Honor, if the Attorney General has
	20	no objection to this, you will recall the slide of Bev's Deli,
	21	we'd just like the Board since the slides, I understand, are
	22	in evidence, we're not going to ask you to take this into
	. 3	evidence, but here's a couple of other photographs of Bev's
	24	Deli that the Board might like to contrast in their own mind of

25 the slide.

1	JUDGE SMITH: Okay.
2	Mr. Brock?
3	MR. BROCK: Thank you, Your Honor.
4	Whereupon,
5	JOHN BAER
6	DONALD BELL
7	ANTHONY M. CALLENDRELLO
8	PAUL R. FRECHETTE
9	JOHN D. BONDS
10	JAMES A. MACDONALD
11	RICHARD H. STROME
12	WILLIAM T. WALLACE
13	having been previously duly sworn, resumed the witness stand
14	and was examined and testified further as fo ws:
15	CROSS-EXAMINATION
16	BY MR BROCK:
17	Q Is it Mr. Bell, Dr. Bell?
18	A (Bell) Mr. Bell.
19	Q Mr. Bell, 1'm Matt Brock for the Town of Hampton.
20	I'd like to just clarify a few points raised by Attorney
21	Sneider's examination this morning.
22	As I understand your role in preparing the Stone &
23	Webster study of August '87 that was to identify available
24	shelters in the beach areas; is that correct?
25	A (Bell) Potentially available, yes.

- 1 Q And you compiled a list of essentially every
- 2 structure in the beach areas, is that correct, every building?
- 3 A (Bell) Not every building, just the ones that were
- 4 businesses. Not -- we didn't do the private residences.
- 5 Q With that qualification?
- 6 A (Bell) Yes.
- 7 Q Thank you.
- 8 After you compiled that list, do I understand that
- 9 there was some other individual or individuals at Stone &
- 10 Webster who determined, I believe you used the term this
- 11 morning which of those shelters were reasonable?
- 12 A (Bell) They assigned a -- using the Aldrich
- 13 reference as a guide and their knowledge, they assigned shelter
- 14 factors, shielding factors to each building. A few were
- 15 rejected but most were put down, and they're shielding factors
- 16 on the work sheets.
- 17 Q So if I'm correct, you used the term, that reasonable
- 18 shelters were those which ended up in Stone & Webster study,
- 19 the reference is simply to those shelters which mot the .9
- 20 shielding factor criteria?
- 21 A (Bell) Yes.
- 22 Q Were there any other criteria in order to get on the
- 23 Stone & Webster list?
- 24 A (Bell) If we thought the building was too open, in
- 25 other words, that porch on Brown's that was all screens, then

- 1 that was eliminated.
- 2 Q All right. Well, would you agree with me that out of
- 3 approximately 210 structures in Hampton Beach, 205 ended up on
- 4 Stone & Webster; is that correct, approximately?
- 5 A (Bell) That would be a good guess.
- 6 Q So -- strike that. So it's your testimony, though,
- 7 that there was some consideration in addition to the .9 factor
- 8 as in amount of glass, ventilation systems, proximity to the
- 9 plant that did play a role in whether or not the structure was
- 10 included in Stone & Webster?
- 11 A (Bell) It was mostly based on the .9. What else he
- 12 did in making his determination he didn't always share with me.
- 13 Q So you don't know for certain what the basis was for
- 14 inclusion in Stone & Webster beyond the .9 shielding factor?
- 15 A (Bell) Beyond the .9.
- 16 Q But it's your testimony there were additional
- 17 factors?
- 18 A (Bell) Perhaps in one case that I can remember where
- 19 it was just too open.
- 20 Q Beyond that one case, do you know of any instances?
- 21 A (Eell) No.
- 22 Q If I was to represent to you that two of the
- 23 structures contained on the list for the Town of Hampton,
- 24 specifically the Budapest at page four of the -- excuse me, do
- 25 you have a copy of the Stone & Webster?

- 1 A (Bell) Yes. The August '87, yes.
- 2 Q I believe at page four of that study for the Town of
- 3 Hampton, so that would be 4 of 16.
- 4 A (Callendrello) I've got that, Budapest Apartment?
- 5 Q That's correct.
- 6 A (Callendrello) Yes.
- 7 Q That as well as the Debonair on page 11 of 16 of the
- 8 same study. If I was to represent to you that, at the time
- 9 Stone & Webster listed them as potential shelters for the
- 10 public those buildings had been condemned by the Town of
- 11 Hampton Fire Department, would you have any basis to dispute
- 12 that?
- 13 A (Bell) No, I wouldn't dispute that if that's what
- 14 you represent.
- 15 Q Okay. Would that surprise you?
- 16 A (Bell) I don't recall seeing any signs to that
- 17 effect. I didn't notice any. If we had, we probably wouldn't
- 18 have listed them.
- 19 Q If you had seen a sign?
- 20 A (Bell) If we had seen a sign that the building was
- 21 condemned. We did eliminate some buildings because they were
- 22 closed, permanently closed apparently or long-term closure with
- 23 signs.
- 24 Q And that would account for approximately the five out
- 25 of the roughly 200 buildings that were eliminated; is that

- 1 correct? Is that a yes?
- 2 A (Bell) Yes.
- 3 Q Mr. Callendrello, is it presently the position of New
- 4 Hampshire Yankee that there is adequate shelter for the beach
- 5 population in the event of an emergency at Seabrook?
- 6 A (Callendrello) Yes.
- 7 Q What's the basis for that opinion?
- 8 A (Callendrello) The basis for the opinion is,
- 9 starting off as my definition of shelter, and it is as I had
- 10 indicated earlier, consistent with the definition of shelter
- 11 that's been put forth by members of NRC staff in other
- 12 proceedings and that is, shelter is essentially, you do the
- 13 best you can with what you have.
- In that case, shelter is the shelter-in-place
- 15 concept, in-place meaning, in buildings, indoors that meet the
- 16 dose reduction factors established and accounted for in the New
- 17 Hampshire radiological emergency response plan, that is, .9
- 18 dose reduction factor whole body and the thyroid or the
- 19 inhalation dose reduction factors.
- 20 Starting with that concept and that basis, then
- 21 looking at the numerical or the capacity in numbers of
- 22 buildings that meet those criteria as established by the Stone
- 23 & Webster shelter study which yields approximately 91,000
- 24 shelter spaces or capacity for roughly 91,000 individuals.
- 25 And the final piece of information is comparing that

- 1 capacity of 91,000 with the peak population for the area of
- 2 interest in this case which is what I'll call Hampton Beach
- 3 South, south of Great Boars Head and all of Seabrook Beach of
- 4 roughly 31,000. And those numbers are given in our Attachment
- 5 3 to our testimony.
- 6 The exact number of shelter space as potential
- 7 shelter space is 91,527. Estimated peak population for that
- 8 area 31,239. So we've got roughly a three-to-one ratio of
- 9 available shelter space to peak population.
- 10 Q That is the basis for your opinion, there's adequate
- 11 shelter to protect the public; is that correct?
- 12 A (Callendrello) Yes.
- 13 Q Do I understand then that any shelter identified in
- 14 Stone & Webster in the opinion of New Hampshire Yankee would
- 15 adequately protect the public in the event of an emergency,
- 16 could be used as shelter to adequately protect the public in
- 17 the event of an emergency?
- 18 A (Callendrello) It's a little bit different than the
- 19 first question you asked.
- 20 Q I hope it is.
- 21 A (Callendrello) There is sufficient shelter to
- 22 provide shelter within the criteria of that -- within the
- 23 criteria assumed by the New Hampshire plan.
- 24 Q I don't know if that's exactly responsive, but let me
- 25 try again and see if we can join the issue. What I'm asking

- 1 is, any shelter, as I understand it, listed in the Stone &
- 2 Webster study has been determined to meet the .9 dose reduction
- 3 factor; is that correct?
- 4 A (Callendrello) It is at least that good, yes.
- 5 Q Am I correct then that in New Hampshire Yankee's
- 6 view, any of those shelters in Stone & Webster would adequately
- 7 protect the public in the event of an emergency?
- 8 MR. TURK: Your Honor, maybe we could have a
- 9 definition of what counsel means when he says, "adequately
- 10 protect the public." Is that a dose standard?
- MR. BROCK: I believe it's a regulation, Your Honor.
- 12 JUDGE SMITH: I think -- I assume he's accepting Mr.
- 13 Callendrello's definition, and now he's testing him on whether
- 14 that applies to every single shelter listed in Stone & Webster.
- MR. TURK: Well, if counsel is stating that the
- 16 regulatory standard is that a shelter provide adequate
- 17 protection, I think it would help, one, if he provides us with
- 18 the citation to the statute or to the regulation.
- 19 JUDGE SMITH: It's not counsel's definition, it's
- 20 Callendrello's definition.
- MR. TURK: No, Your Honor.
- 22 MR. BROCK: Excuse me, Your Honor, for clarification,
- 23 I'll withdraw my comment, and as the Board has framed the
- 24 question.

- BY MR. BROCK:

  Q Can you answer that, Mr. Callendrello?
- 3 A (Callendrello) I'm sorry, I missed the Board's
- 4 question.
- 5 JUDGE SMITH: I didn't mean to have such an impact
- 6 upon the questioning here, I just thought I understood it to be
- 7 not your standards that you're probing, but whatever standards
- 8 are being used. Because the thrust of your question is not the
- 9 standard but the adequacy of the report. The completeness and
- 10 accuracy of the report, not the standard; right?
- 11 MR. BROCK: That's correct.
- MR. TURK: I must have misunderstood, I thought
- 13 counsel was asking him whether the shelters identified in the
- 14 study provided, quote: "Adequate protection," close quote; and
- 15 I didn't understand the definition of that phrase had been
- 16 established.
- 17 BY MR. BROCK:
- 18 Q Can you --
- JUDGE SMITH: Well, go ahead and proceed as you will.
- 20 BY MR. BROCK:
- 21 Q Can you answer the question as framed, Mr.
- 22 Callendrello?
- 23 A (Callendrello) No, I can't answer it.
- 24 Q All right, let's try again.
- 25 What I'm trying to determine is whether or not any of

- 1 the shelters identified in Stone & Webster, in the opinion of
- 2 New Hampshire Yankee, could be used by a member of the public
- 3 in a radiological emergency, and in New Hampshire Yankee's view
- 4 that would adequately protect that person under those
- 5 circumstances?
- 6 MR. TURK: Your Honor, the same problem. The phrase,
- 7 "Adequately protect." I'd like to hear what counsel's
- 8 definition of that phrase is.
- 9 The question is simply whether any structure in the
- 10 Stone & Webster survey provides at least a .9 protection
- 11 factor. That's different from the tail end of the question
- 12 which asks, is that adequate protection.
- JUDGE SMITH: Well, now you're sticking with your
- 14 question apparently?
- MR. BROCK: That's correct, Your Honor.
- 16 JUDGE SMITH: And do you understand -- I'm sorry, go
- 17 ahead and finish your statement.
- MR. BROCK: My question -- I am sticking with that; I
- 19 want to know if the witness can answer the question.
- JUDGE SMITH: All right. Can you answer the
- 21 question? Do you know what adequate protection is?
- 22 THE WITNESS: (Callendrello) I think so, and maybe
- 23 if I just give my definition of adequate it will help clarify
- 24 the --
- MS. WEISS: I can't hear.

- 1 THE WITNESS: (Callendrello) The question is, does
- 2 New Hampshire Yartee -- is New Hampshire Yankee of the opinion
- 3 that shelter can adequately protect the population. And my
- 4 position is, yes, sheltering can adequately protect the
- 5 population, consistent with my definition of sheltering, and
- 6 that is, you do the best you can with what you have.
- 7 And in this case, the criteria is established in the
- 8 New Hampshire plan, and if those buildings meet that criteria
- 9 then sheltering is adequate.
- 10 BY MR. BROCK:
- 11 Q So it's fair to say then, if a building is there and
- 12 it's used, it's the best you can do, that's adequate shelter;
- 13 is that a fair characterization?
- 14 A (Callendrello) Yes.
- 15 Q Mr. Bonds, I understood yesterday that the state
- 16 presently does not know whether there is adequate shelter for
- 17 the beach population; is that correct?
- 18 A (Bonds) That's based on testimony I gave yesterday?
- 19 Q That was my understanding of your testimony?
- 20 A (Bonds) I haven't reviewed yesterday's transcripts,
- 21 I don't recall all that I said yesterday.
- Q Well, let me ask you this first, is it your view or
- 23 is it the view of the State of New Hampshire that it presently
- 24 cannot determine whether there is adequate shelter for the
- 25 beach population to protect them in the event of an emergency?

- 1 A (Bonds) That it cannot?
- 2 Q Correct?
- 3 A (Bonds) That it has not determined?
- 4 Q Correct?
- 5 (Witnesses conferring)
- 6 THE WITNESS: (Bonds) As I recall my response, what
- 7 I do recall from yesterday was that the state has not conducted
- 8 its own study as to whether or not there is space in
- 9 relationship to where the crowds are doing the definitive work.
- 10 The state's position is based upon its judgment that
- 11 there is adequate space for the time that's needed to shelter,
- 12 given that shelter is an extremely limited option in the first
- 13 place.
- 14 BY MR. BROCK:
- 15 Q Do I then understand your testimony that the state's
- 16 position is that there is presently demonstrated adequate
- 17 shelter for the beach population?
- 18 A (Bonds) It is the state's judgment that at the
- 19 present time there is adequate shelter for the beach population
- 20 for the period of time in which the state would expect the
- 21 population to shelter.
- 22 Q All right. Do you have the transcript from
- 23 yesterday?
- 24 A (Bonds) No, I do not.
- MR. BROCK: Could someone provide that.

1	MR.	BISBEE:	Yes.
A	1411.7	had the top had have been "	1 6 6

- 2 MR. BROCK: I'm referring to page 10573, beginning
- 3 third paragraph, let me just read a sentence into the record.
- 4 I believe this is a response of you, Mr. Bonds: "So we haven't
- 5 done our own assessment yet as to whether or not there is
- 6 adequate shelter." I can continue: "But given that there was
- 7 an awful lot of shelter there and that there are people there,
- 8 there's got to be some relationship, we just don't know what
- 9 that is, but we would certainly expect that at some point in
- 10 time an independent assessment is going to be made."
- 11 BY MR. BROCK:
- 12 Q Can you explain that to me in light of the answer you
- 13 just gave?
- 14 A (Bonds) Yes, certainly. The answer I just gave, and
- 15 what was intended with what is here is that, it is the state's
- 16 judgment at this time that there is adequate shelter. In term;
- 17 of we haven't done our own assessment, we certainly haven't
- 18 Hone our own assessment. As to whether or not there is
- 19 adequate shelter, that's what the empirical process, the
- 20 empirical study, whether it's Stone & Webster style study or
- 21 somebody else's study of our own, that has not been done yet.
- 22 But the judgment is there that there is adequate shelter.
- Q Well, and is that judgment based upon, essentially,
- 24 adopting the Stone & Webster study and the view of New
- 25 Hampshire Yankee rather than doing an independent assessment?

- 1 A (Bonds) Absolutely not.
- Q What is the basis for the judgment of the state, that
- 3 there was presently adequate shelter?
- 4 A (Bonds) The judgment was there long before Stone &
- 5 Webster undertook any study. It was there with the original
- 6 volumes of the plan, Rev. O way back. It's based upon an
- 7 understanding that there is shelter that's there; there are
- 8 people that are there. And that should the situation arise in
- 9 which you did have to take sheltering or recommend sheltering,
- 10 that there would be adequate space available for all of the
- 11 people at that location, given that sheltering is an extremely
- 12 limited option in the first place.
- 13 Q Do you accept Mr Callendrello's view that the
- 14 shelter option is essentially, do the best with what you have?
- 15 A (Bonds) I'm not certain that's Mr. Callendrello's.
- 16 I think he was referring to somebody else. I don't 'now that I
- 17 would phrase it in exactly that fashion.
- 18 Q Assume that's Mr. Callendrello's position, would you
- 19 accept that?
- 20 Excuse me, I'd appreciate it, Mr. Bonds, if you would
- 21 answer the question. If you can't answer it, say so, and you
- 22 may consult.
- MR. BISBEE: Excuse me, Your Honor, may the witnesses
- 24 be allowed to ask whether they may confer as well.
- MR. BROCK: I'm sorry, I wasn't clear on that. I

- 1 would like it -- my question is directed to Mr. Bonds, if he
- 2 cannot answer it, have him say so and then he may consult.
- 3 THE WITNESS: (Bonds) Are you asking me on my
- 4 personal opinion or are you asking me as a representative of
- 5 the state?
- BY MR. BROCK:
- 7 Q That is correct, as a representative of the state?
- 8 MR. BISBEE: Excuse me, Your Honor, again, I
- 9 apologize for interrupting. I'm unclear on the ground rules
- 10 here, I thought initially -- at the commencement of this
- 11 proceeding early on last fall the attorneys questioning the
- 12 witness panel had asked that whenever the witnesses wanted to
- 13 confer that they so indicate on the record. Now I understand
- 14 that the witness is not being allowed to confer if he so
- 15 wishes.
- 16 JUDGE SMITH: That's my understanding of what your
- 17 requirements are, that he can only confer if he's unable to
- 18 answer the question.
- 19 MR. BROCK: That's correct, Your Honor.
- MR. BISBEE: Excuse me, if he's unable to answer it?
- 21 JUDGE SMITH: Yes.
- 22 BY MR. BROCK:
- 23 Q Can you answer that question, Mr. Bonds?
- 24 A (Bonds) As a representative of the state I would
- 25 need to confer with other representatives from the state who

- have more authority than I in terms of the decisionmaking process to assure that the answer I gave is consistent with
- what the state's position is. I'm just a planner in the
- process.
- If it's possible I'd like to speak with Dr Wallace
- and Mr. Strome.
- et/65 (Continued on next page.)

1	MR. BRUCK: Go anead.
2	(Witnesses confer.)
3	THE WITNESS: (Bonds) If the question is does the
4	state consider Mr. Callendrello, given that he said it or that
5	he might have said it, that we make do, we make do with the
6	best we have, if the state accepts that definition, the answer
7	is no.
8	We have made a considered judgment based upon the
9	experiences that we have within the state and the basis of the
10	knowledge that we have of that area, given that it's not based
11	on an empirical evaluation or study, that there is adequate
12	shelter in that area for the short duration in which a
13	sheltering recommendation would be mache.
14	BY MR. BROCK:
15	Q So if I understand your testimony that whatever the
16	state's view, for there to be adequate shelter it must be more
17	than a best effort?
18	A (Bonds) I'm confused as to best effort.
19	Q All right. I'll withdraw the question.
20	Mr. Bonds, if I could refer you to Attachment 3 of
21	the panel's testimony, Page 1. The last sentence on that page
22	which I'll read into the record, saying, "Therefore, available
23	potential shelter capacity is almost three times the estimated

Is it the state's position that that potential

peak beach population. "

24

- 1 shelter capacity means that there is that -- that there is
- 2 adequate shelter capacity of a ratio of three to one?
- 3 A (Bonds) The state has no opinion with regard to this
- 4 attachment.
- 5 Q The state does not adopt or subscribe to this part of
- 6 the testimony?
- 7 A (Bonds) That's clearly stated within the testimony.
- 8 The state has done nothing with regard to the Stone & Webster
- 9 study.
- 10 Q Mr. Bonds, if I understood your testimony yesterday,
- 11 you indicated that those buildings identified in the Stone &
- 12 Webster study would not necessarily be the buildings which the
- 13 state may select in order to shelter the public in the event of
- 14 an evacuation; am I correct?
- JUDGE SMITH: Well, think about that question. In
- 16 the event of a sheltering decision you mean?
- 17 MR. BROCK: That's correct, Your Honor.
- 18 THE WITNESS: (Bonds) I'm trying hard to remember
- 19 the context in that answer. If you have a place in here, that
- 20 would be helpful.
- 21 BY MR. BROCK:
- 22 Q Yes, I'm sorry.
- I guess, first of all, I've stated a point. Do you
- 24 agree with that or not?
- 25 A (Bonds) That the state may not adopt the same

- 1 shelters that Stone & Webster has adopted as --
- 2 Q In order to shelter the public, correct?
- 3 A (Bonds) If as a result of the state's own study
- 4 determine that Stone & Webster had included buildings that it
- 5 we ld not, then the answer is true.
- 6 Q Okay. Did I understand that comment to mean that
- 7 there are buildings outside the Stone & Webster study for which
- 8 the state believes are available to shelter the public?
- 9 A (Bonds) The state hasn't completed any study in
- 10 order to make that kind of judgment.
- 11 Q Well, you would agree, based on the statements Mr.
- 12 Bell just made, that essentially Stone & Webster has listed
- 13 virtually every building in the beach areas; isn't that
- 14 correct?
- There are no other buildings; isn't that correct?
- 16 JUDGE SMITH: Business building
- MR. BROCK: That's correct, Your Honor.
- 18 THE WITNESS: (Bonds) To the extent that he has
- 19 listed virtually every other building, yes, that's correct.
- 20 He's listed virtually every building.
- MR. BROCK: Mr. Strome.
- 22 THE WITNESS: (Strome) Should I switch with Mr.
- 23 Bel1?
- MR. BROCK: Fine, it shouldn't be long.
- 25 BY MR. BROCK:

- 1 Q I want to clarify a couple of points that I believe
- 2 you made yesterday.
- 3 As I understand it, the State of New Hampshire and
- 4 your office have not talked to any of the owners of the
- 5 structures designated in the Stone & Webster as potential
- 6 public shelters.
- 7 A (Strome) I don' think that's exactly what I said
- 8 yesterday, but that's, in essence, correct. I did caveat it
- 9 with, for example, the facilities survey's program, if you
- 10 recall. So those caveats still stand.
- 11 Q Okay. But with reference to emergency planning for
- 12 Seabrook, there has been no discussion; isn't that correct?
- 13 A (Strome) Essentially that's correct.
- 14 Q Now I believe in response to Attorney Sneider's
- 15 question, in the state's view should the state have letters of
- 16 agreement with those owners, if I understood, your answer was,
- 17 yet, the state has not reached that point in the process, and
- 18 wishes to consult the Attorney General's office.
- 19 Is that a fair characterization?
- 20 A (Strome) That's pretty -- thit's a fair
- 21 characterizat on of what I said.
- 22 Q Let's assume that the state consults the Attorney
- 23 General's office, and the AG's office comes back and says, it
- 24 is not a legal requirement for the state to get letters of
- 25 agrement or owner permission to use or rely on private

- 1 structures for radiation shelters.
- 2 On that basis is it your position, or the state's
- 3 position that they would not seek permission from the owners?
- 4 A (Strome) I guess to answer your question, I would
- 5 have to say that I would follow the guidance given to me by
- 6 legal counsel.
- 7 Q So, in your view, it's strictly a matter of whether
- 8 or not letters of agreement or permission are required by law.
- 9 A (Strome) I'm not sure that that's the case. I'm
- 10 saying that whatever the Attorney General or his representative
- 11 might encourage me to do is essentially what I'd do.
- 12 Q Okay. And your office has no opinion or view about
- 13 any other factors which should be considered about whether or
- 14 not owners should be consulted or permission obtained?
- 15 A (Strome) Not at the present time.
- 16 Q Mr. Bonds, I believe earlier, in response to a few
- 17 questions by Attorney Sneider, if I understood your testimony,
- 18 the transit-dependent transients, I believe we called them the
- 19 2 percent population for shorthand reference?
- 20 A (Bonds) I don't recall calling them the 2 percent
- 21 population.
- 22 Q You understand the population --
- 23 A (Bonds) The transportation-dependent transients,
- 24 yes.
- 25 Q That it would be the state's view that that group

- 1 would be sheltered in state and municipal buildings; is that
- 2 correct?
- 3 A (Bonds) The state, in selecting shelters for that
- 4 population, would certainly look first to state and municipal
- 5 structures, yes.
- 6 Q Can you identify for me the number of state buildings
- 7 in Hampton Beach?
- 8 A (Bonds) No, sir.
- 9 Q All right. Well, I don't want to play a game with
- 10 you. I have gone through Stone & Webster and I have found two.
- 11 If you have that, let me just refer you to the pages.
- 12 A (Bonds) I don't have that.
- 13 Q You do not have the Stone & Webster study?
- 14 A (Bonds) No, I do r.ot.
- 15 A (Callendrello) There's one here.
- 16 Q Okay. I'm looking on page 12 of 16 for the Town of
- 17 Hampton shelters. The fifth building designated, I'll quote
- 18 it. "Restrooms (state beach closed); Ocean Boulevard (across
- 19 from casino)", indicating there is 3000 square feet in that
- 20 structure; is that correct?
- 21 A (Bonds) I see that, yes.
- 22 Q Let me refer you to the other state facility of which
- 23 I am aware, which is on Page 14. I thought it was on Page 14.
- Yes, on Page 14, the state park bathhouses on Ocean
- 25 Boulevard, 2000 share feet.

- 1 A (Bonds) Number two on the list; yes, I see that.
- 2 Q You're not aware, or is anyone on the panel aware of
- 3 any other state structures in Hampton Beach?
- 4 A (Callendrello) I'm not aware of any other state
- 5 structures on Hampton Beach.
- 6 (Witnesses confer.)
- 7 THE WITNESS: (Strome) I can't recall. We certainly
- 8 have not run a catalogue. But I know that I have been inside a
- 9 structure on Hampton Beach from which the DRED offices work,
- 10 the lifeguards work, and that doesn't seem to be part of the
- 11 grouping that you read to us.
- 12 BY MR. BROCK:
- 13 Q So what you are identifying is your belief that there
- 14 is one other state structure?
- 15 A (Strome) Well, I guess I'm saying I'm not -- I'm not
- 16 saving that your list isn't correct, but it seems to me I
- 17 recall at least one other structure that might be available.
- 18 So I guess what I'm doing is questioning whether your number
- 19 two is correct.
- 20 Q Let me just make this point.
- 21 At least with respect to the state-owned buildings on
- 22 the pages which I have identified, as I understand it the
- 23 restrooms at the state beach, that's what it is. It's a men's
- 24 room and a ladies' room; is that correct?
- 25 A (Bonds) I've never been there. I don't Know.

- 1 Q And the other building, half of it is a restroom and
- 2 half of it is used for storage.
- 3 Are you aware of that?
- 4 A (Bonds) I've never been there. I don't know.
- 5 Q Assume that's true, in your opinion, are those
- 6 appropriate shelters for the public?
- 7 A (Bonds) I believe I responded -- the testimony
- 8 you're referring to -- was that the state has yet to identify
- 9 what the criteria are for selecting the buildings that it would
- 10 use for the transportation-dependent transients.
- 11 Q Okay. So that, in your view, state-owned bathrooms
- 12 may or may not at this time constitute adequate shelters for
- 13 the public.
- 14 A (Bonds) From the state's standpoint, I couldn't
- 15 answer that.
- 16 From a planning standpoint, that would be down some
- 17 place on the list, but I don't know where it would stand with
- 18 respect to anything else.
- 19 Q Okay. Just to follow up on that.
- In going through Stone & Webster, I have identified
- 21 two municipal buildings in the Stone & Webster study on Hampton
- 22 Beach. One is the police station and one is the fire station.
- 23 Can anyone on the panel identify any other municipal
- 24 buildings of which they are aware?
- 25 A (Bonds) No.

- 1 A (Callendrello) There's the fire station garage, of
- 2 course, which we saw some photos of today.
- 3 Q Mr. Strome, in your opinion, would it be good
- 4 emergency planning to utilize a police station of the Town of
- 5 Hampton which under the plan is to be a center for emergency
- 6 response in the event of a radiological emergency?
- 7 A (Strome) I think it would be entirely appropriate to
- 8 use the police station as a response center for an emergency.
- 9 Q I'm sorry if I wasn't clear.
- 10 Would it be appropriate to use the police station,
- 11 which is a response center, also for a public shelter?
- 12 A (Strome) I think, in the normal daily course of
- 13 events, if I 'ecall the police station at Hampton Beach, it's
- 14 used not orly for response to emergency situations, but it's
- 15 also, at least it was at one time, used as a holding area for
- 16 people.
- 17 In a sense, I suppose you could call that a shelter.
- 18 Q So that would not bother you as an emergency
- 19 planning.
- 20 A (Strome) As an emergency planner, I think space is
- 21 essentially space.
- MR. BROCK: Thank you. I have nothing further.
- 23 CROSS EXAMINATION
- 24 BY MS. WEISS:
- 25 Q Gentlemen, my name is Ellyn Weiss. I represent the

- 1 New England Coalition.
- 2 You recall that at the outset of this testimony you
- 3 vouched for the truth and accuracy of the entire package of
- 4 testimony each and every one of you; is that correct?
- 5 A (Callendrello) That is correct.
- 6 Q My question is to the state witnesses.
- 7 Considering the testimony in response to questions by
- 8 Mr. Brock and response to questions by Ms. Sneider, do you
- 9 still vouch for the accuracy and truth of Attachment 3 to the
- 10 testimony?
- 11 A (Strome) I think the state's position has really not
- 12 changed, and we stated in the testimony that we have not
- 13 accepted in whole certainly the testimony provided in
- 14 Attachment 3.
- 15 Q It would be correct then that as to the state
- 16 witnesses, you do not adopt Attachment 3 to the testimony.
- 17 A (Strome) Would you please repeat that, counselor.
- 18 Q Would it be correct then that the state witnesses do
- 19 not adopt Attachment 3 to the testimony?
- MR. LEWALD: Cruld I hear the end of that? The voice
- 21 drops and we lose it with the raffic back here.
- 22 BY MS. WEISS:
- 23 Q Is it correct that the witnesses do not adopt -- the
- 24 state witnesses do not adopt attachment 3 to the testimony?
- 25 A (Strome) I think that's a correct statement.

- 1 Q Now you are counting within the definition of
- 2 publicly accessible shelter spaces for purposes of sheltering
- 3 the 98 percent motel and hotel rooms that are occupied; that's
- 4 correct, isn't it?
- 5 A (Callendrello) That's correct.
- 6 Q Do you have any estimate of what percentage of the
- 7 total available space are in those hotel and motel rooms?
- 8 A (Callendrello) No, I don't.
- 9 Q It certainly is a substantial portion of the
- 10 immediate area across the street from the beaches, isn't it?
- 11 A (Callendrello) I just said I don't have an estimate.
- 12: Q With regard to use of occupied motel rooms for people
- 13 coming off the beach, has the state given any thought to the
- 14 potential legal liability a motel owner might be exposed to if
- 15 he or she opened rooms occupied by other people to people
- 16 coming off the beach?
- 17 A (Strome) That eventuality has not been considered as
- 18 yet by the state.
- 19 Q But you do intend to look at that issue.
- 20 A (Strome) Certainly.
- 21 Q And that's a serious issue, isn't it?
- 22 A (Strome) We will look at the issue. I can't begin
- 23 to proffer a legal opinion.
- 24 Q It's a serious question, isn't it?
- 25 A (Strome) If it's a serious legal question, if you're

- 1 asking me that, I can't answer.
- 2 Q With regard to the forms that the motel owners have
- 3 filled out and some of the other owners of publicly accessible
- 4 shelters -- this is to Mr. Callendrello who testified on this
- 5 yesterday.
- I believe you testified that you had seen those forms
- 7 that are attached to the testimony of Mr. Moughan, I believe?
- 8 A (Callendrello) It appears in two locations:
- 9 Attached to testimony of Mr. Moughan, and also attached to the
- 10 testimony of the Commonwealth & witnewses. I don't recall
- 11 which ones.
- 12 Q And it was your testimony that you did not
- 13 necessarily consider those statements to the effect that the
- 14 owners of the spaces would not make them available to be
- 15 reflective of what might happen during an actual emergency,
- 16 correct?
- 17 A (Callendrello) Yes. As I believe I indicated, I was
- 18 skeptical as to the conclusions that were being reached from
- 19 those responses.
- 20 Q Well, regardless of what might happen in an actual
- 21 emergency, wouldn't you agree with me that those statements
- 22 indicate a present intention not to participate in planning?
- 23 A (Callendrello) No. As I indicated yesterday, I've
- 24 got considerable skepticism as to the results of either of
- 25 those forms based on the conflicting nature of some of them.

You don't believe that when the motel and hotel 1 owners and shop owners say that they will not open their 2 buildings, that that at least conveys the sense that they will 3 not participate in planning to open those buildings? 4 A (Callendrello) That's not what I said. What I said 5 was that I have considerable doubt as to the validity of either 6 of those forms, because when on one form it says somebody will 7 not do something, and on another form it says somebody will do 8 something. That, in my mind, casts considerable doubt on the 9 validity of either one. 10 Well. I'm not sure we're communicating. 11 Regardless of what these people may or may not do in 12 an actual emergency, maybe they will open their motels and 13 their shops, maybe they won't. Maybe they will board them and 14 leave. Regardless of what they may or may not do during an 15 emergency, wouldn't you agree with me that those statements 16 indicate the present intention of those people not to 17 participate in planning? 18 (Callendrello) No, because as I indicated, there's 19 conflicting information on those forms. 20 Are any of them currently participating in planning? 21 A (Callendrello) There has been no contact with those 22 people either on the part of New Hampshire Yankee, or as I 23

understand from the testimony yesterday, on the part of the

(202) 628-4888

Heritage Reporting Corporation

State of New Hampshire.

24

25

So they haven't been requested to participate in

2	planning as far as I can tell.
3	Q There is no planning going on in that regard,
4	correct?
- 5	A (Callendrello) I didn't say that. I said there has
6	been no contact, and they haven't been requested to participat
7	in planning.
8	Q Mr. Bonds, I want to just briefly pursue your
9	statement that although you have not reviewed the Stone &
10	Webster other than a cursory review, and you haven't done your
11	own independent study, it is your judgment that there is
12	adequate shelter space. And I would like to know what you're
13	basing that judgment on.
14	A (Bonds) That's the judgment of the state.
15	May I have some time to discuss this with the others
16	the other state witnesses here?
17	Q You are the planner; is that correct?
18	A (Bonds) I'm the planner for the Division of Public
19	Health Services, yes.
20	Q You may consult.
21	(Witnesses confer.)
22	THE WITNESS: (Bonds) The judgment is based upon the
23	experience that the state has had with that area for some
24	period of time. When the plan has been drafted, the issue

E66

25 comes up is it reasonable, and people who are familiar with

- 1 that area, who deal with that area on a routine basis have yet
- 2 to say, no, that's not a reasonable assumption to make.
- 3 The s makes that judgment based upon its
- 4 experience, not in any study that's been completed.
- 5 Q Well, you haven't had any experience in sheltering 70
- 6 to a hundred thousand people.
- 7 A (Bonds) I don't know 70 to 100 thousand people is
- 8 the figure.
- 9 Q Well, there is a large number of people on the beach.
- 10 A (Bonds) Yes.
- 11 Q We can agree to that.
- 12 A (Strome) Well, I think -- let's just clarify the
- 13 record here.
- 14 We have heard some numbers thrown around about the
- 15 numbers of people on the beach. The empirical data ce ainly
- 16 suggests that it's considerably less than 70,000.
- 17 Q What number do you accept?
- 18 A (Strome) Well, I think we're just clarifying the
- 19 record with respect to the number you used, counselor.
- 20 Q What number do you have a number that you accept
- 21 for the peak summer day on the beach?
- 22 A (Callendrello) That's in the testimony on Page 20,
- 23 and it's the addition of the 23,841 and 7,398, and the total is
- 24 31,239 estimated peak population for the area of Hampton Beach,
- 25 south of Route 51, and Seabrook Beach.

- 1 Q That's the --
- 2 A (Callendrello) South of Great Boars Head, excuse me.
- 3 Q That's the two or three-mile ring?
- 4 A (Callendrello) Two miles.
- 5 Q Two miles?
- And that's the number that the state accepts?
- 7 A (Strome) We think that's a reasonable number, and
- 8 we're certainly willing to look in the future at other
- 9 statistical samplings or whatever studies are done that will
- 10 give us more accurate information.
- So I guess it's still an open question, but it seems
- 12 a reasonable number.
- 13 Q Do you have a number for the entire length of the
- 14 beach within the EPZ?
- 15 A (Strome) Is that including Massachusetts?
- 16 Q Yes. Well, let's forget Massachusetts. Let's just
- 17 take New Hampshire.
- 18 A (Strome) It's all within the EPZ. That's why I had
- 19 asked.
- 20 Q Yes, I understand that.
- 21 A (Callendrello) I don't have a number off the top of
- 22 my head. I think that was in our direct testimony on
- 23 evacuation time estimates though.
- 24 A (Strome) I'm quite sure it's been computed, but I
- 25 don't recall it right offhand.

Heritage Reporting Corporation (202) 628-4888

- 1 Q Now is it --
- 2 A (Callendrello) That is something I could get during
- 3 a break.
- 4 Q May or may not be necessary. I'll let you know, I
- 5 think.
- 6 Let's take your number then, 31,250, give or take, on
- 7 the beach rithin two miles. You say that it's the state's
- 8 judgment that there is sufficient shelter of .9 shielding
- 9 factor for those 31,000 within that same two-mile ring; is that
- 10 correct?
- 11 A (Bonds) If the need should be to shelter that
- 12 population, yes.
- 13 Q All right. Now can you give me, to the degree it's
- 14 possible, the elements of that experience that support the
- 15 judgment, specifically as you can?
- 16 A (Bonds) Say that one more time now.
- 17 Q What elements, what elements of your experience lead
- 18 you to believe that there is sufficient, adequate shelter space
- 19 for that 31,250 people?
- 20 (Witnesses confer.)
- 21 THE WITNESS: (Bonds) The state has accepted the
- 22 sheltering -- the potential for sheltering of a beach
- 23 population as being remote. Mr. Strome has pointed out that
- 24 it's certainly not a 50/50. I've testified as to the factors
- 25 that would lead one to indicate whether or not -- the factors

- 1 that would predispose a decisionmaker towards sheltering.
- The judgment that I have and the experience that I
- 3 have is not based upon the number of walks down the boardwalk
- 4 back and forth, whatever, though there is some of that built
- 5 into it. I have been to Hampton Beach long before I ever knew
- 6 Seabrook and far before I ever knew there was a Division of
- 7 Public Health in this state.
- 8 And when it rained, people disappeared. And I assume
- 9 not everybody went home because there were no traffic jams.
- 10 Now that's experience I gained long before I was ever
- 11 involved in this process, and I brought that with me when I
- 12 came. So there is a certain amount of judgment based on that
- 13 from seat-of-the-pants experience so to speak.
- When considering that sheltering is an extremely
- 15 narrow option that's available to the state for a number of
- 16 factors, one of those factors certainly has to be what are we
- 17 dealing with in terms of the size of the crowd. If you're
- 18 dealing with a peak day, massive numbers of people, hot, all
- 19 get-out situation, those kinds of factors have to be weighed
- 20 into the decision. What is your reliability on this date that
- 21 there is in fact, as opposed to the day that's so-so, Tuesday
- 22 morning, what is your opinion of that day. You may have more
- 23 confidence on the Tuesday morning than you do on a Sunday
- 24 afternoon.
- 25 But given if you did have to do it on a Sunday afternoon.

- 1 and that was the best way of maximizing your dose savings, you
- 2 may -- the state may very well end up making its recommendation
- 3 on the basis of, we're going to stretch -- you know, it's going
- 4 to be the rafters, but we've got to make this recommendation
- 5 because that's the only recommendation we can make at this
- 6 time.
- 7 That's my best effort at a sincere answer toward your
- 8 request.
- 9 BY MS. WEISS:
- 10 Q What I hear from that are two things. First of all,
- 11 the element of experience which you gave me is the fact that
- 12 when you're there and it rains people get off the beach
- 13 somehow.
- 14 A (Bonds) That's my experience. I can't speak that
- 15 that's the same experience of everybody else who's been
- 16 involved in this process.
- 17 Q I wouldn't be surprised if it were.
- And the second thing I hear is that you really don't
- 19 think you are going to use this sheltering option.
- 20 A (Bonds) No, I didn't say that. I said if it has to
- 21 be used, it will be used. But the probability of its being
- 22 used is less than the probability of evacuation.
- 23 Q With regard to the discussion of the state beach
- 24 bathrooms, if there weren't anything better than bathrooms as
- 25 far as publicly owned buildings on the beach, would you

- 1 consider those suitable shelter space for the 2 percent?
- ? A (Bonds) The transportation-dependent transients.
- 3 Q Yes.
- 4 A (Bonds) And there was absolutely nothing else.
- 5 MR. BISBEE: Objection. The question was asked by
- 6 Mr. Brock and answered.
- 7 MS. WEISS: I don't recall that that question was
- 8 asked in a different series of questions.
- 9 JUDGE SMITH: Well, I recall him asking about the
- 10 building which one-half was a restroom, the other half was a
- 11 storage room, and is that regarded as -- that seems to be the
- 12 same question.
- 13 It's a different question?
- 14 MS. WEISS: Yes. Mr. Bonds said that as a planner he
- 15 would put that at the bottom of his list. What I heard him
- 16 saying was he would not prefer to use bathrooms if there was
- 17 another choice. And I'm asking him if there isn't anything
- 18 better as far as public municipal buildings on the beach, will
- 19 they use those bathrooms as shelters, and I don't think --
- 20 JUDGE SMITH: All right.
- 21 MS. WEISS: -- that question has been asked.
- JUDGE SMITH: Okay.
- 23 THE WITNESS: (Bonds) From my personal standpoint as
- 24 a planner, I indicated that we haven't established what the
- 25 criteria are for the selecting of the municipal buildings, the

- 1 state or local municipal buildings, whatever might be in that
- 2 area.
- 3 If we selected the criteria and somehow those
- 4 facilities were the only facilities that were there, and they
- 5 didn't match the criteria, my recommendation as a planner would
- 6 be, wait a minute, we blew this one. We're going to have to
- 7 back up and see where we go from here.
- 8 From the standpoint of the decisionmaker, if that's
- 9 all we have and the time is there, we have to do something. I
- 10 mean we've got to put these people someplace. It's either
- 11 there or leave them on the sand. They would be acceptable from
- 12 that standpoint.
- But as a planner not having gone through the
- 14 selection process yet, I would go back to the decisionmakers
- 15 and say, this is the best we've got. Do we go with it or not,
- 16 and then it's a judgment then.
- 17 BY MS. WEISS:
- 18 Q So if you were faced with an ad hoc kind of
- 19 situation, you would use the bathrooms. But if you're going
- 20 through a planning process, you would not plan to use the
- 21 bathrooms; is that correct?
- 22 A (Bonds) I -- if we went through a planning process
- 23 and that was there at the top of the list, I would certainly
- 24 have to take a look and begin to ask questions, how long are we
- 25 expecting them to stay there, and begin to ask other questions.

- On an ad hoc basis, if we had to do it tomorrow and
- 2 that's all there was, I would have to go with the
- 3 decisionmaker's judgment on that. You would use them.
- 4 Q Could we turn to Page 19 of the testimony, please?
- 5 Under the heading -- well, where you give the
- 6 circumstances under which shelter might be the protective
- 7 action of choice. Number one, "Dose savings: Sheltering could
- 8 be recommended when it would be the most effective option in
- 9 achieving maximum dose reduction." And then it goes on from
- 10 there.
- 11 Can you give me one hypothetical example of a
- 12 situation where that would be the case during the summer
- 13 months?
- 14 A (Callendrello) Where it would be or --
- 15 Q Where it would be the case that sheltering would be
- 16 the most effective action.
- 17 A (Callendrello) In general, assuming that we started
- 18 off -- I have a hard time coming up with a scenario that leads
- 19 us to the maximum dose savings, but the general characteristics
- 20 of such a release would be that no earlier actions had been
- 21 taken, either precautionary or early protective actions. The
- 22 release is of short duration and will arrive in the beach area
- 23 within a short amount of time. And we are in a situation where
- 24 there is a large beach population, close to the peak, so that
- 25 the evacuation time is significantly longer than the exposure

- 1 duration.
- 2 A (Bonds) I would add one criteria that Mr.
- 3 Callendrello left out. And that is that there is no
- 4 particulates in the release.
- 5 Q No particulates?
- 6 A (Bonds) No particulates in the release.
- 7 Q And why did you say that? Why did you add that?
- 8 A (Bonds) Well, if you're going to put them into
- 9 shelter and you're going to have to bring them back out and
- 10 move them someplace else because you've left -- there's
- 11 material on the ground you don't want them in, you certainly
- 12 get them out of there in the first place; don't have them be
- 13 safe for a short while and then expose them all over again.
- 14 A (Wallace) One other thing, I think, on that. The
- 15 criterion is that also you don't anticipate the release to be
- 16 lasting for a long -- you know, a prolonged period of time.
- 17 That would be added into a reason where your dose savings would
- 18 be more -- would be greater with shelter as opposed to
- 19 evacuation.
- 20 Q Strikes me that it would be awfully difficult to know
- 21 under these circumstances, particularly the duration of the
- 22 release. Are you confident of your ability to predict that?
- 23 A (Bonds) I think Mr. MacDonald has addressed that.
- 24 A (MacDonald) Your Honor, it's very difficult to
- 25 predict that particular quantity, and various sequences offer

- 1 various levels of confidence in making that prediction. It's
- 2 really hard to say.
- 3 Q But that would really be a key -- a key variable in
- 4 making this choice of protective action, wouldn't it be, in the
- 5 summer months and the circumstance that you described to me?
- 6 A (Callendrello) That is certainly one of the variable
- 7 that will affect the decision. There is a lot that are
- 8 important variable. Obviously, exposure, exposure rate would
- 9 be a key variable as well. So it is a variable that affects
- 10 the outcome of that calculation and that decision.
- 11 Q And I really gather that the purport of what you've
- 12 said in writing and what you've testified to over the last few
- 13 days is that if there is any serious uncertainty in your minds,
- 14 you've got to order the evacuation; is that correct?
- 15 A (Strome) I don't think there's any question. The
- 16 total thrust of our testimony is that evacuation is the
- 17 preferred option.
- 18 Q Under No. 2, consideration of local conditions, you
- 19 talk about considering impediments to evacuation as one of the
- 20 factors in determining whether the order sheltering order
- 21 evacuation
- 22 What kind of impediments do you have in mind there?
- 23 A (Bonds) These would be physical impediments: fog.
- 24 snow, road conditions, bridge situations, highway
- 25 constructions.

- 1 Q Could you turn to Page 26 of the testimony, please?
- MR. BISBEE: Twenty-six?
- 3 MS. WEISS: Twenty-six.
- 4 BY MS. WEISS:
- 5 Q And I want to direct your attention to the citstion
- 6 by Aldrich, et al. the February '78 citation, which you cite in
- 7 support of your analysis of the use of various protection
- 8 factors as I understand it.
- 9 Is Aldrich, and in particular, this volume a commonly
- 10 accepted authority in this field, and particularly when it
- 11 comes to considerations bearing on the choice among protective
- 12 actions?
- 13 A (MacDonald) Ms. Weiss, there are two citations there
- 14 on that page.
- 15 Q Yes, I'm --
- 16 A (MacDonald) They are equally of acceptance in the
- 17 radiation protection community. Any study of that nature on
- 18 these kinds of accident sequences and the potential protection
- 19 from shelters are just part of the literature, and this is no
- 20 better or no worse than any of the other reports.
- 21 Q Well, you've cited --
- 22 A (Callendrello) I'd like to --
- 23 Q Go ahead.
- 24 A (Callendrello) -- make that even a little stronger.
- 25 And that is, that is the citation that is referred to in

	1	NUREG-0654 under Element J-10-M, footnote to J-10-M.
	2	Q It's one of three or four, I think, references
	3	provided there.
	4	A (Callendrello) That's correct.
	5	Q And will you agree with me that Aldrich, et al., also
	6	conclude that the time required to implement sheltering
	7	significantly influences the effectiveness of that option?
	8	A (Callendrello) I don't recall that there, but if you
	9	could point me to a citation, I'll be giad to
	10	Q Well, it just so happens I can.
E67	11	(Continued on next page.)
	12	
	13	
•	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
	25	

- 1 A And if you can point me to it.
- Q and if you turn to page 13.
- 3 A (Callendrello) I've got it.
- 4 Q Okay. And I'll read that sentence since we've all
- 5 got the document now.
- 6 MR. FLYNN: Excuse me, the copy that I have is only
- 7 numbered up to page nine.
- 8 MS. WEISS: Oh, you don't have page -- well, does
- 9 anybody -- can anybody share with you.
- 10 JUDGE SMITH: Won't work, Ms. Weiss.
- 11 MR. DIGNAN: That's tricky.
- 12 (Laughter)
- 13 JUDGE SMITH: We can sharp.
- MS. WEISS: I don't know how that happened. Did you
- 15 have a full one?
- JUDGE SMITH: Yes, I have a full one. Was that a
- 17 mistake.
- MS. WEISS: No, that was all part of a nefarious
- 19 plot.
- 20 BY MS. WEISS:
- 21 Q Do the witnesses have 13?
- 22 A (Callendrello) Yes, we do.
- 23 Q Oh, thank heaven. All right.
- 24 Let's read it, it's the first sentence of the first
- 25 full paragraph on that page, quote: "The time required to

- 1 implement a sheltering/relocation strategy significantly
- 2 influences the effectiveness of each of the response strategies
- 3 discussed here." I can stop with that sentence. You'd agree
- 4 that what that says is that, the effectiveness of sheltering is
- 5 heavily influenced by the time required to get the people into
- 6 the shelters, wouldn't you?
- 7 MR. DIGNAN: Ms. Weiss, before the witnesses answer
- 8 the question, are you planning to offer the entire study into
- 9 evidence?
- 10 MS. WEISS: No, I'm not.
- MR. DIGNAN: Then : object to the question as taking
- 12 a document totally out of context, taking one thought out of
- 13 context and putting the witnesses in an unfair situation. I
- 14 have , objection if we read the whole paragraph in and let the
- 15 record 'ead that way or the Board accepts the entire study.
- MS. WEISS: Well, I don't really mind. I thought
- 17 that not offering would save problems, but if you prefer to
- 18 have it or if you prefer to have the entire paragraph. I'm at
- 19 your --
- 20 JUDGE SMITH: Let's have the paragraph.
- MS. WEISS: All right. Now, let me -- would you like
- 22 me to just read the remainder of the paragraph into the record?
- 23 JUDGE SMITH: All right.
- MS. WEISS: "Ideally shelter-access by the public
- 25 would be accomplished prior to the arrival of the cloud of

- 1 radioactive material. If this cannot be accomplished, the
- 2 effectiveness (dose reduction) diminishes almost linearly with
- 3 increasing obtaids exposure time. Radiation exposure from
- 4 radionuclides deposited on the ground and other surfaces
- 5 continues long after cloud passage, and in many instances, in a
- 6 relatively short time results in a dose much greater than the
- 7 dose from the other exposure pathways. Therefore the time
- 8 interval between the cloud passage and the public relocation is
- 9 also very important and should be minimized," end quote.
- MR. TURK: Your Honor, before we have -- well. I
- 11 don't know if there's a question pending but I would like to
- 12 request a few minutes to read through the document, since its
- 13 just been presented to us for the first time.
- 14 MR. DIGNAN: Is the question, is that of the
- 15 document?
- 16 MS. WEISS: No. The question is, whether they would
- 17 agree with that.
- 18 THE WITNESS: (Callendrello) I would agree with that
- 19 to the --
- 20 MR. TURK: Well, before you answer, could I have a
- 21 few minutes. I assume that that answer will -- I take it that
- 22 answer will -- consider it not given yet.
- 23 (Laughter)
- MS. WEISS: Well, considered interrupted by you.
- 25 MR. TURK: Your Honor, I would ask Ms. Weiss if she

- 1 wants to make representation or if she would ask the witnesses
- 2 if they're aware what kind of a source term was used in this
- 3 study and whether it in fact relates at all to a possible
- 4 source term here.
- 5 MS. WEISS: You can ask that when you have an
- 6 opportunity. I don't believe that -- this is a generic
- 7 statement.
- 8 MR. DIGNAN: Well, Ms. Weiss, I was doing fine until
- 9 you said that. Now, if you're saying that this is a generic
- 10 statement, I'm going to object to the question unless you're
- 11 prepared to put the entire study into evidence.
- 12 Are you insisting that the witnesses are taking this
- 13 and it's being represented to them as a generic statement?
- 14 Because if you are, then I want -- I'm objecting until you
- 15 agree to put the whole study in evidence.
- MS. WEISS: I have no problem putting the whole study
- 17 in evidence. It doesn't seem to me necessary. It's generic in
- 18 the sense that it's not specific to Seabrook. It is not
- 19 specific to any particular source term. I think the question
- 20 is easily answered by the witnesses if giv... an opportunity.
- 21 If you would wish to have this entire document, I'll be happy
- 22 to supply it.
- 23 MR. DIGNAN I do. Thank you.
- 24 JUDGE SMITH: Now, the Board has its requirements,
- 25 too, now that you've that out. What is the purpose of this

- 1 paragraph, what are you using it for?
- MS. WEISS: It's merely to establish that -- well,
- 3 the recognized authority in this field, one of three
- 4 authorities cited in NUREG-0654 and in section J, standard
- 5 J-10, that is choice of protective action, states that: "The
- 6 effectiveness of sheltering is heavily influenced by the time
- 7 required to get people into the shelters." That much is true.
- 8 And they've agreed with me that he is an authority, and we've
- 9 read in the statements that he made.
- 10 And the next question is, ones the witness agree with
- 11 that; that's the pending question.
- JUDGE SMITH: What's your complaint? I don't
- 13 understand what your complaint is, Mr. Dignan? I thought I
- 14 heard the witnesses yesterday, in essence, testify
- 15 substantially the way this paragraph reads.
- MR. DIGNAN: Yes. I have no problem with that.
- MS. WEISS: I don't think it's at all controversial.
- MR. DIGNAN: I wasn't quarreling, once the paragraph
- 19 was read, I wasn't quarreling until we had some editorials that
- 20 this was generic and the witnesses had to take it that way.
- 21 And then I get the same problem Mr. Turk gets, when you start
- 22 picking out a study, throwing it in front of an expert witness,
- 23 and so the record later, when everybody has forgotten what
- 24 really went on here and who's looking at who and what, all it
- 2: reads at the Appeal Board is they were given this as a generic

- 1 statement, do they agree with it.
- Now, if they're going to be asked if they disagree
- 3 with it in the contracts with Aldrich, I got no problem with
- 4 it.
- MS. WEISS: Mr. Dignan --
- 6 MR. DIGNAN: I didn't have any problem with it until
- 7 she pinned the speech on the question.
- 8 MS. WEISS: Gr. Dignan, I did not choose the study.
- 9 The study was referenced by -- in your testimony.
- 10 JUDGE SMITH: Well, wait a minute.
- MS. WEISS: And I'm certainly entitled to point out
- 12 that it has other parts to it.
- MR. DIGNAN: I had no problem with your question
- 14 until you editorialized on what the statement was.
- MS. WEISS: Well, the word "generic" is not in the
- 16 question now. If I understand that to be your objection, we
- 17 can pretend the word "generic" was never uttered; it is not
- 18 part of the question.
- MR. DIGNAN: Well, then why don't we reask the
- 20 question and maybe the problem --
- MS. WEISS: The witnesses agree.
- JUDGE SMITH: Do you understand where you are,
- 23 because I don't?
- 24 (Laughter)
- MR. DICNAN: The question, as I understand it, do the

- 1 witnesses agree with this paragraph.
- 2 JUDGE SMITH: What's your request?
- 3 MR. TURK: Let me explain what my problem was, I have
- 4 no objection to the question being asked and letting the
- 5 witnesses answer to the best of their understanding of the
- 6 document, and of the protection afforded by shelters in the
- 7 Seabrook area.
- 8 I'm not sure that the witnesses have indicated
- 9 they're familiar with the document.
- 10 MS. WEISS: They have indicated they're familiar with
- 11 the document; it's referenced in their testimony. We discussed
- 12 -- we established that five minutes ago.
- JUDGE SMITH: But also, in fairness, it's referenced
- 14 for a different purpose.
- MS. WEISS: Well, no, it isn't. It's referenced for
- 16 precisely the same purpose which is evaluating the
- 17 effectiveness of shelter. It is one aspect of shelter. One
- 18 aspect is, what's the quality of the building.
- 19 JUDGE SMITH: Right.
- MS. WEISS: The other aspect is, how long does it
- 21 take the people to get there.
- JUDGE SMITH: That I don't read there, but
- 23 nevertheless, I think that they have to concede having cited
- 24 that Aldrich is an authority. But that's not an issue, is it?
- MR. DIGNAN: No, Your Honor.

- 1 MR. TURK: No, Your Honor. And my -- I don't want to
- 2 tip the witnesses, maybe -- could we have a bench conference.
- 3 May we approach the bench for a moment.
- 4 JUDGE SMITH: Well, I don't know why. I mean, of
- 5 course, I won't know why until you tell me, but do you really
- 6 have to have a bench conference over this?
- 7 This is a panel of people that is very competent to
- 8 say what they believe, say whether they agree or disagree with
- 9 it. If you have a special reason for a bench conference, we'll
- 10 have it, but I think that the panel has been signaled enough
- 11 that they're having some type of danger here and they better
- 12 watch --
- MS. WaISS: It's really absolutely absurd, there's
- 14 nothing dangerous about it.
- MR. TURK: Your Konor, I'm not saying there's any
- 16 danger at all. I have a reason in mind, 1 don't know -- I'm
- 17 not going to let the witnesses know what's on my mind because I
- 18 think it would be unfair to Ms. Weiss, and I'm willing to live
- 19 with it.
- JUDGE SMITH: Overruled.
- 21 THE WITNESS: (Callendrello) Let me make sure I
- 22 still understand the question. We were asked if we agree with
- 23 this statement that's presented on page 13 in the first full
- 24 paragraph.

25

- 1 BY MS. WEISS:
- 2 Q Yes?
- 3 A (Callendrello) I agree with the statement to the
- 4 extent and to the significance that the authors of the document
- 5 attached to it, recognizing that in other parts of the document
- 6 in that same section, particularly on page nine, they're
- 7 indicated that there are other factors that contribute to a
- 8 large extent to the efficacy of a sheltering strategy, that is,
- 9 the type of structure as well as how long they remain there.
- 10 And in fact, the specific scenario that this
- 11 statement refers to is a sheltering relocation strategy which
- 12 may not be applicable in all cases that we're discussing here.
- 13 Q Weil, I thought that, you know, when we discussed
- 14 this with Mr. Bonds one of the disadvantages of sheltering is
- 15 that you always have to eventually relocate the people; isn't
- 16 that correct?
- 17 A (Bonds) No.
- 18 Q Oh, you don't have to do that all the time?
- 19 A (Bonds) No, you do not.
- JUDGE SMITH: Well, he was talking about a noble gas
- 21 type of puff release without particulate. Yesterday we talked
- 22 about, I thought, pretty much this situation, and I thought
- 23 they explained it and explained it consistent with the language
- 24 in this paragraph unless there's subtleties here that I've
- 25 missed.

- 1 MS. WEISS: I don't believe that there are, Your
- 2 Honor.
- 3 JUDGE SMITH: There's something I'm missing. I'm
- 4 missing something.
- 5 MR. TURK: May we approach the bench?
- 6 JUDGE SMITH: All right come on. One counsel from
- 7 each party.
- 8 (Bench conference)
- 9 JUDGE SMITH: The question -- what is the question?
- 10 Do you agree with this paragraph?
- MS. WEISS: Right.
- 12 JUDGE SMITH: And we've agreed that we should direct
- 13 your attention to the portion of it which states: "Radiation
- 14 exposure from radionuclides deposited on the ground and other
- 15 surfaces continues long after cloud par tges. In many
- 16 instances, in a relatively short time results in a dose much
- 17 greater than the dose from other exposure pathways."
- We want you to bear in mind that that exists in
- 19 there. That's all. There's nothing mysterious really.
- 20 Nothing trick. It's just that they feel that, that aspect of
- 21 the question is material to the question and to the answer.
- 22 BY MS. WEISS:
- 23 Q And you understood that when you gave your answer,
- 24 Mr. Callendrello?
- 25 A (Callendrello) As I indicated, I didn't take that

- 1 statement in isolation, I considered when I indicated I agreed
- 2 that it was for a sheltering/relocation strategy which would be
- 3 utilized in the event that radionuclides would be deposited on
- 4 the ground, and that the timing that's referred to is the time
- 5 to implement the entire option, not necessarily just the
- 6 sheltering portion of it, but the entire option.
- 7 Q And does the State of New Hampshire have any estimate
- 8 of the time to implement the entire option for the 98 percent
- 9 of the beach population sheltering option?
- 10 A (Bonds) The entire option being --
- 11 Q What I understood Mr. Callendrello was saying was to
- 12 mean both the sheltering and the relocation; correct?
- 13 A (Callendrello) That's correct. The timing is
- 14 important in the event that you have an incident or an accident
- 15 that results in the deposition of radionuclides. And therefore
- 16 the timing that is important is the timing associated not only
- 17 with the time to implement the sheltering portion but also the
- 18 relocation portion.
- 19 Q Right. So we have to know how long it takes to get
- 20 people in and then how long it takes to get people back out;
- 21 correct?
- 22 A (Callendrello) When you say, get in, you mean into a
- 23 shelter, yes.
- 24 Q Yes.
- 25 A (Callendrello) As well as to remove them from the

- 1 area where dep ition has occurred.
- 2 Q Yes. Does the State of New Hampshire have any
- 3 estimates of how much time that will take?
- 4 A (Bonds) The State of New Hampshire, as explained
- 5 previously, would not consider -- I won't say would not, very
- 6 likely would not consider recommending shelter when there is
- 7 any potential for relocation afterwards through a radioactive
- 8 material.
- 9 We would be concerned of a period of exposure prior
- 10 to sheltering, and that's why we adopted the shelter-in-place
- 11 as opposed to another sheltering strategy.
- 12 Q Do you have any estimate of how long it would take to
- 13 get the people off the beach on a peak summer day into a
- 14 shelter?
- MR. DIGNAN: I object. I recall at least 15 minutes
- 16 between the Attorney General and Mr. Bonds on this very subject
- 17 of how long it would take to get everybody from the beach to a
- 18 shelter. At least 15 minutes. Asked and answered.
- JUDGE SMITH: It certainly seems to be very familiar
- 20 to me. I wouldn't want to estimate how much. Unless you have
- 21 a different type of question or you want the question --
- MR. DIGNAN: By the way, that 15 minutes, Mr Lewald
- 23 wanted me to make clear on the record, it was length of
- 24 interrogation, that length of time to reach the shelter.
- MS. WEISS: Well, I remember a range of five minutes

	1	to a half an hour.
	2	BY MS. WEISS:
	3	Q Is that correct, is that your estimate of how long i
	4	would take?
	5	MR. DIGNAN: What we're saying is, it was asked and
	6	answered and I object on that ground, Your Honor.
	7	JUDGE SMITH: Well, Ms. Weiss would like to be
	8	reminded as to what the answer was. It's a matter of courtssy
	9	MR. TURK: Your Honor, if that were the
	10	characterization on the part of the testimony I have to object
	11	because those are not the numbers I romember.
	12	MS. WEISS: Well, let's let the witness answer then.
	13	MR. DIGNAN: Why don't we find the prior testimony.
•	14	JUDGE SMITH: Well, why don't we take an afternoon
	15	break, 15 minutes.
	16	(Whereupon, a 15 minute recess was taken.)
et/68	17	(Continued on next page.)
	18	
	19	
	20	
	21	
	22	
	23	
	24	
	25	

- 1 MS. WEISS: Your Honor, I'm informed by my
- 2 colleagues that it is on the record, that estimates of the time
- 3 to get into shelter are on the record, so we will pass that and
- 4 go on to the next area.
- F, BY MS. WEISS:
- Could I take you to Appendix 2, Page 4 of 47? 6 Q
- 7 THE WITNESS: (Bonds) Appendix 1.
- MS. WEISS: That's the New Hampshire response to 8
- 9 FEMA.
- 10 JUDGE SMITH: Appendix 1.
- MS. WEISS: I'm sorry. Appendix 1. Appendix 1, Page 11
- 12 4 of 47.
- 13 JUDGE SMITH: Ladies and gentlemen, I might explain a
- change in our protocol this afternoon. 14
- (Interruption from the audience.) 15
- JUDGE SMITH: Wher the hearing was being conducted in 16
- the legislative hall, the doard did not object to signs in the 17
- 18 audience because of the way the witness table was located and
- the parties were located. 19
- 20 In this room, however, as you can see, the witness
- panel is facing the audience. And in any adjudication any 21
- place in this country, no court, no judicial officer would 22
- 23 permit signs to be --
- (Interruption from audience.) 24
- JUDGE SMITH: -- flash d at witnesses and suggestions 25

- 1 and intimidation. It is the distracting aspects o' it that we
- 2 object J this time. So we will require in this instance that
- 3 no signs be waved from the audience.
- 4 Thank you.
- 5 BY MS. WEISS:
- O Q Do the witnesses have the page?
- 7 A (Callendrello) Yes.
- 8 Q About seven lines up from the bottom -- well, the
- 9 sentence that starts about 10 lines up from the bottom, "Third,
- 10 the state --
- 11 (Interruption from audience.)
- 12 JUDGE SMITH: Want to try again.
- 13 BY MS. WEISS:
- 14 Q "Third, the state feels that if a release of
- 15 radiation warranted movement of the public, they are much more
- 16 likely to be afforded meaningful dose reductions by moving out
- 17 of the EPZ than by moving to a shelter within the EPZ."
- And I'd like you to tell me what you meant by the
- 19 phrase "meaningful dose reductions" in that sentence.
- 20 A (Strome) May we conference, please?
- MS. WEISS: Yes.
- 22 (Witnesses confer.)
- 23 THE WITNESS: (Bonds) The phrase there, "afford a
- 24 meaningful dose reductions by moving out of the EPZ than by
- 25 moving to a shelter within the EPZ" is intended to mean

- 1 within -- it's intended to be relative to one action versus the
- 2 other; that you're going to get more dose reduction by moving
- 3 out away than by picking up and then stopping before getting
- 4 out of the EPZ and staying at a different shelter location.
- 5 That the more meaningful reduction is going to be gotten by
- 6 going outside, by evacuating all the way out than by evacuating
- 7 part of the way out, getting out of the vehicle, and going
- 8 inside.
- 9 BY MS. WEISS:
- 10 Q What's a meaningful dose reduction? Does it have any
- 11 quantitative range to it at all in your mind?
- 12 A (Bonds) Any dose reduction is going to be a
- 13 meaningful dose reduction.
- 14 Q Well, if I put the word "any" in place of the word
- 15 "meaningful", that sentence would make no sense now, would it?
- 16 A (Bonds) Yes, that sentence would make no sense if
- 17 you put "any" in front of "meaningful".
- 18 Q Well, it doesn't say that they would receive no dose
- 19 reduction by one strategy, and some dose reduction by another.
- 20 It says they are much more likely to be afforded meaningful
- 21 dose reduction by moving out of the EPZ.
- Now, can you give me any content whatsoever to the
- 23 phrase "meaningful"? Is it anything at all? Any dose
- 24 reduction is meaningful?
- 25 A (Strome) There is no empirical definition of

- 1 meaningful, no.
- Q How about in your mind? Those are your words.
- 3 A (Strome) Those are my words?
- 4 Q That's the state response to FEMA.
- 5 A (Strome) I understand. What I'm saying is that we
- 6 have not ascribed a specific empirical definition to
- 7 meaningful.
- 8 Q How about an unempirical definition?
- 9 A (Strome) Well, those are your words, counselor.
- 10 Q Well, any kind of definition.
- 11 A (Strome) I think Mr. Bonds pointed out that those
- 12 are relative terms.
- 13 Q Could we go to Figure 2.6-7? That's Attachment 2,
- 14 Page 3 of 12. The decision criteria for selecting between
- 15 evacuation and sheltering recommendations.
- 16 A (Callendrello) Okay, I've got that.
- 17 Q Okay. The witnesses have that?
- 18 A (Bonds) Yes.
- 19 Q All right. We get fairly quickly to the choice --
- 20 well, let's just pass through this.
- You start at Step 1, and do the projected doses. And
- 22 if they exceed the PAGs for thyroid or whole body, then you
- 23 take an immediate action which is to recommend that the
- 24 Department of Agriculture place dairy animals on stored feed,
- 25 correct?

- 1 A (Bonds) Yes.
- 2 Q And then we go to -- is that Block 2 where it says
- 3 "2" over on the side of that diamond in the middle?
- 4 A (Bonds) Yes.
- 5 Q All right. And then you ask yourselves whether
- 6 evacuation can be completed prior to plume arrival.
- 7 And my question to you is, plume arrival at what
- 8 point?
- 9 A (Bonds) Can evacuation be done before the
- 10 population -- can evacuation be done to get the population out
- of there before the plume arrived where the population is. And
- 12 if you have a community in mind, can you evacuate that
- 13 community before the plume arrives at that community.
- 14 Q Well, when you are going through this analysis,
- 15 presumably you have all communities in mind within the EPZ.
- 16 A (Bonds) We have all communities in mind within the
- 17 EPZ, yes, but it depends a great deal upon the nature of the
- 18 accident, the weather conditions at the time. If the wind is
- 19 blowing straight in one direction, yes, you have everything
- 20 else in mind, but your area of immediate concern is what's
- 21 downwind.
- 22 Q So it would be before the plume arrives at the first
- 23 group of population?
- 24 A (Bonds) Well, the area that's most immediately
- 25 affected downwind. That's the reference location that we had

- 1 talked about before, whether it's two, five or 10 miles
- 2 downwind from there; whatever it is that you wanted to use as a
- 3 reference there.
- 4 Q So you would do the calculation? Would you do
- 5 several calculations? One for two, one for five, and one for
- 6 10?
- 7 A (Bonds) You could do several calculations, yes.
- 8 A (Callendrello) I think we indicated yesterday that
- 9 the procedure states that a separate form should be filled out
- 10 for each area -- each distance of interest.
- 11 JUDGE SMITH: Mr. Callendrello, I'm informed that
- 12 you're too far away from the amplifying microphone to be heard
- in the rear of the room. Would you try to remember to bring it
- 14 over?
- 15 THE WITNESS: (Callendrello) Sure. Would you like
- 16 me to repeat that?
- 17 JUDGE SMITH: Would you, please?
- 18 Could you hear him all right?
- 19 Well, I guess you could be heard.
- 20 BY MS. WEISS:
- 21 Q Let's assume that we've done this calculation for the
- 22 two-mile reference point. Am I correct that that would be the
- 23 one you would look at first if you're talking about during the
- 24 summer months?
- 25 A (Bonds) Yes.

- 1 Q All right. So we've done that calculation, and the
- 2 answer to that question is, no, evacuation can't be completed
- 3 prior to plume arrival.
- 4 We then go down into Block 3, correct?
- 5 A (Bonds) Yes.
- 6 Q And we then ask ourselves can any action begin before
- 7 the plume has passed. And now my question is, passed where?
- 8 A (Bonds) Passed over the population.
- 9 Q So passed the two-mile point?
- 10 A (Bonds) Yes. I mean before that two-mile point is
- 11 enveloped in the plume is the intent there.
- 12 Q Okay. And if I wanted to see exactly how you do that
- in more detail, would I go back to Block 3? Is that where
- 14 that's described, on Page 8 of 12?
- 15 A (Bonds) Yes.
- 16 Q Now, if there is insufficient time to begin eitner
- 17 protective action, what do I do? Do I just tell the people not
- 18 to do anything, or not say anything?
- 19 A (Bonds) If there is insufficient time to begin
- 20 either protective action, then you have to begin considering
- 21 which protective action is going to afford the greatest dose
- 22 savings for the greatest number of people.
- 23 A (Callendrello) I want to make sure that this is
- 24 clear.
- In this block, the question is, can any action begin

- 1 before the plume has passed. Passed means come and gone.
- 2 Q And if the answer is that we can't evacuate, we can't
- 3 begin to evacuate before the plume has passed, does the
- 4 decision criteria indicate that we would recommend a shelter,
- 5 if you look back at the Figure 2.6-7?
- (Callendrello) Yes, that's what the figure shows. 6
- If we can't begin before the plume has passed, we're 7
- going to take one of those actions. We're just going to decide 8
- which will, in your words, afford the maximum dose savings to 9
- 10 the largest number of people and order that, correct?
- (Bonds) Yes. 11
- MS. WEISS: I think I'm finished. Let me just check 12
- 13 through here.
- 14 No further questions.
- CROSS-EXAMINATION 15
- 16 BY MR. BACKUS:
- Good afternoon, gentlemen. I am Robert Backus with 17
- the Seacoast Anti-Pollution League. 18
- The areas that I originally intended to cover have 19
- been well covered, so I just have a very few clarifying 20
- 21 questions.
- Mr. Bonds, I believe you testified on a questioning 22
- 23 by Attorney Brock that the state had for a long time held the
- judgment that there was adequate sheltering in the event that 24
- needed to be or was recommended to be the protective action in 25

- 1 the event of an accident; is that right?
- 2 A (Bonds) And that were the recommendation.
- 3 Q Yes.
- 4 A (Bonds) Yes.
- 5 Q You said, I think, in fact that that went back as far
- 6 as the first plan which was called Rev. O, which was submitted
- 7 in December of '85?
- 8 A (Bonds) For as long as I've been involved in the
- 9 planning process since the summer of '83, shelter-in-place has
- 10 been there, yes.
- 11 Q Yet, you do recall, do you not, that in Rev. 2, which
- 12 was submitted in August of '86, at Page 2.6-7 of Volume 1, the
- 13 plan stated, "Sheltering may not be considered a feasible
- 14 protective action on the seacoast beaches during the summer."
- 15 A (Bonds) That's true, sir.
- 16 Q And that statement is no longer in the plan as most
- 17 recently amended, as I understand it; is that correct?
- 18 A (Bonds) I haven't seen the most recent amendments to
- 19 that. But if you represent that that's what's there, I will
- 20 accept that.
- Q Well, in any event, when the plan did contain that
- 22 language, the state already held the judgment that there was
- 23 adequate shelter in the event that was the protective action
- 24 that was needed.
- 25 A (Bonda) Yes.

- 1 Q Well, let me ask Mr. Strome. Why was that sentence
- 2 included that sheltering may not be a feasible protective
- 3 action in prior additions on this point?
- 4 A (Strome) I think at that time, as is the case now,
- 5 that we felt that evacuation was the preferred option.
- 6 Q But would it be correct to say that at all times the
- 7 state has considered it to be -- sheltering, that is -- to be a
- 8 feasible protective action even though not likely to be the
- 9 preferred action?
- 10 A (Strome) I can't answer that question. I wasn't
- 11 present during the Gallen Administration when the plans were
- 12 formulated; at least the beginning portion of them.
- 13 Q Well, you were certainly in office with Rev. 2 was
- 14 formulated and presented.
- 15 A (Strome) But that wasn't your question, counselor.
- 16 Q All right. Well, let's redirect the question toward
- 17 Revision 2 of 8-86.
- 18 A (Strome) Okay. I think that I've already answered
- 19 the question. I think that the state has held for quite
- 20 sometime and still holds that evacuation is the preferred
- 21 option.
- 22 Q Now, you were just discussing with Attorney Weiss the
- 23 decision block diagram which is Figure 2.6-7 on Attachment 2,
- 24 Page 3 of 12 in the prefiled testimony. And you were being
- 25 directed toward the third diamond-shaped decision block where

- 1 the question is asked, can any action begin before the plume
- 2 has passed. And then if the answer to that is yes, you go on
- 3 to further choices between -- choice criteria between shelter
- 4 and evacuation; is that right?
- 5 A (Bonds) Yes.
- 6 Q And, Mr. Bonds, if the answer to that is no, it
- 7 indicates that you go to conduct monitoring and
- 8 decontamination; is that right?
- 9 A (Bonds) Yes, it is.
- 10 Q In other words, in that situation there would be no
- 11 further decisions to be made, no protective action to be
- 12 recommended or implemented, right?
- 13 A (Strome) May we conference, please?
- MR. BACKUS: Okay, and the record will show that you
- 15 are conferencing. Go ahead.
- 16 THE WITNESS: (Strome) Thank you.
- 17 (Witnesses confer.)
- 18 THE WITNESS: (Bonds) If I understand your question,
- 19 does the phrase "conduct monitoring and decontamination"
- 20 represent the only options that the state would exercise at
- 21 that time.
- 22 BY MR. BACKUS:
- 23 Q Yes, if you had been unable to take protective action
- 24 and the plume has passed.
- 25 A (Bonds) I think that represents the minimum option

- 1 that the state would take at that time. If it's passed, you
- 2 are certainly going to begin the monitoring. Based upon what
- 3 you've identified, what you've discovered in the monitoring,
- 4 you begin the decontamination. You may also take other steps
- 5 that are there in terms of potentially relocation if you need
- 6 to, but this is a chart intended to show the decision criteria,
- 7 hopefully before you -- long before you get to that block, but
- 8 you can't rule out that events may pass you by and you have to
- 9 move on.
- 10 Q And am I correct, Mr. Bonds, that so far as the state
- 11 is concerned monitoring and decontamination are not protective
- 12 actions.
- 13 A (Bonds) In advance of -- in the strict definition,
- 14 that's right, sir.
- 15 (Continued on next page.)
  - 16

E69

- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25

70

- 1 Q In fact, if I'm reading this correctly, at page
- 2 eight of Attachment 2 under the description of the decisions to
- 3 be made at Block 3 you're saying, quote, this is about the
- 4 middle of the paragraph: "In this case DPHS must advise that
- 5 corrective rather than protective action, (i.e., monitoring and
- 6 decontamination) should be taken."
- 7 A (Bonds) Yes.
- 8 Q Correct?
- 9 A (Bonds) Yes.
- 10 Q I have a question for Mr. Callendrello. The
- 11 evacuation time estimates that are incorporated in the
- 12 attachments to the prefiled testimony is a series of tables,
- 13 are those the most up to date and current evacuation time
- 14 estimates?
- 15 A (Callendrello) Yes.
- 16 Q And believe to be the most reliable and accurate time
- 17 estimates the decisionmaker should use?
- 18 A (Callendrello) Yes.
- 19 Q Mr. Bonds or perhaps Mr. Strome. If evacuation of
- 20 the beach areas is ordered will sheltering ever be recommended
- 21 within the, what I guess is called the A-ERPA emergency plan,
- 22 what does that stand for?
- 23 A (Callendrello) Emergency Response Planning Area.
- 24 Q Emergency Response Planning Area, thank you.
- MR. BACKUS: May the record reflect the state

- 1 witnesses are conferring.
- 2 (Witnesses conferring)
- 3 THE WITNESS: (Bonds) If an evacuation is ordered
- 4 for the beach population the evacuation would be for the entire
- 5 area that's there. We would not try to give conflicting orders
- 6 to the same population at the same time. For example, if
- 7 you're on the beach and you don't live here evacuate, if you do
- 8 this or if you live across the street go home, we would not try
- 9 to do that. We'd avoid that at all cost. We don't want
- 10 conflict confusion.
- 11 BY MR. BACKUS:
- 12 Q My understanding is that emergency response planning
- 13 area or ERPA-A is the Towns of Seabrook, Hampton and Hampton
- 14 Beach; is that correct?
- 15 A (Strome) Hampton Falls.
- 16 Q I'm sorry, Hampton Falls, thank you, Mr. Strome.
- 17 So that's one planning area?
- 18 A (Bonds) Yes.
- 19 Q And the question I asked was, if the beaches are
- 20 being ordered to evacuate is there any circumstances under
- 21 which those towns that are in that A planning area, would be
- 22 asked to shelter?
- MR. BACKUS: May the record show the witnesses are
- 24 again conferring.
- 25 (Witnesses conferring)

- 1 THE WITNESS: (Bonds) If the instruction is given 2 all at the same time, because that's what's important for that
- two-mile area, it's important for the entire two-mile area, not 3
- 4 just the beaches within it, we would recommend for the beaches
- 5 the same thing we would recommend for the population that's
- there. Again, we don't make the decisions on the basis of who 6
- 7 you are, but rather where you are, regardless of the reason
- 8 that you're there.
- 9 BY MR. BACKUS:
- 10 Well, I understand that. And I guess I'm asking, I
- understand that you want to have consistent instructions for 11
- people that --12
- (Bonds) Yes. 13
- 14 -- live in approximately similarly geographic
- situations. I guess my question is, is the area in which 15
- you're going to be consistent, is it the two-mile ring or is it 16
- these emergency planning response areas? 17
- (Bonds) It's going to be --18
- MR. BACKUS: And the witnesses are again conferring. 19
- (Witnesses conferring) 20
- THE WITNESS: (Bonds) It's going to be for the 21
- communities. Mr. Strome has pointed out that we don't depend 22
- on an individual to know whether they live within a ring or 23
- outside of a ring. If they live within a community the 24
- recommendation will be for that community, even though some of 25

- 1 it may fall outside of the two mile area.
- 2 BY MR. BACKUS:
- 3 Q So the answer to my question is, if the beaches are
- 4 being asked to evacuate, because the beaches are part of
- 5 planning region A.
- 6 A (Bonds) Yes.
- 7 Q That entire planning region will also be advised to
- 8 evacuate; is that correct, Mr. Strome?
- 9 A (Strome) That's correct.
- 10 Q Do the citizens within each of these towns, in this
- 11 case, Hampton Falls, Hampton and Seabrook know that they're in
- 12 emergency region planning area A?
- 13 A (Bonds) No, they probably do not. But then the
- 14 recommendations are going to be given with regard to the
- 15 communities not with regard to a region or a planning area A.
- 16 I'd like to add a clarification, if I could, in terms
- 17 of what your previous question was. If there is an evacuation
- 18 that takes place at the precautionary stage for the beach
- 19 population and that evacuation is in fact completed long before
- 20 any other action needs to become necessary for a protective
- 21 action, that is a protective action evacuation, the beach
- 22 population has gone; there is the possibility then that that
- 23 area could very well be sheltered. But again, that's a two
- 24 step process precautionary versus protective; I don't want to
- 25 leave any confusion there.

n.

- 1 Q Right.
- 2 Gentlemen, Attorney Weiss asked you about and I don't
- 3 remember whether it was marked or not, but in any event this
- 4 study referenced in your testimony by Aldrich entitled "Public
- 5 Protection Strategies for Potential Nuclear Reactor Accidents,
- 6 Sheltering Concepts with Existing Public and Private
- 7 Structures." I don't know which of you is most familiar with
- 8 that, but doesn't that in fact indicate that certain types of
- 9 structures as opposed to other types of structures can offer
- 10 very ignificant dose reduction savings in the event of an
- 11 accident?
- 12 A (Callendrello) Yes. In table one of that document
- 13 which refers to shielding factors from cloud -- gamma cloud
- 14 sources, yes, there is a range of shielding factors based on
- 15 the type of construction and the size of the building.
- 16 Q And doesn't this study also recommend that, generally
- 17 speaking, because I guess the climate around this part of the
- 18 nation that the housing stock here tends to have -- permanent
- 19 housing stock tends to have pretty good dose reduction factors,
- 20 that is, we tend to have a lot of wood frame houses with
- 21 basements; is that correct?
- 22 A (Callendrello) Yes.
- 23 Q Indeed, on page 17, if everybody has now got an
- 24 edition that goes up to page 17, there's a table five entitled
- 25 "Regionally Average Shielding Factors for Sheltering at

- 1 Location."
- 2 Am I correct that that generally indicates that the
- 3 shielding factor for sheltering in the Northeast is generally
- 4 superior to many other regions in the country?
- 5 A (Callendrello) Generally, yes. This table indicates
- 6 a regionally average shielding factor, yes.
- 7 Q And you would recognize, would you not, Mr. Strome,
- 8 that many of the people within say, regional planning area A,
- 9 Hampton Falls, Hampton and Seabrook would have houses that
- 10 would offer considerable dose reduction factors; would they
- 11 not?
- 12 A (Strome) I know that there's not -- the average dose
- 13 reduction factor of all buildings is certainly different from
- 14 the individual ones, yes, I understand that.
- 15 Q And in the areas outside the beach area wouldn't you
- 16 expect that the dose reduction factors for the structures would
- 17 generally be higher than they would be for structures on the
- 18 beach?
- 19 A (Strome) That's outside my area of expertise, but I
- 20 would make that assumption and would like to check it
- 21 empirically before I agree to absolutely.
- 22 Q Anybody care to disagree with that characterization,
- 23 in all probability on an average the structures used as
- 24 residences outside of the beach area probably have greater dose
- 25 reduction factors than those cottages and so forth that are

- 1 right on the beach strip itself?
- 2 A (Callendrello) I'm not sure I agree with that.
- 3 A (Strome) I get -- the rest of the state delegation
- 4 tells me that the yearround buildings at the beach would
- 5 probably be the same as those that are off the beach -- the
- 6 barrier beach area. So from that standpoint, I guess I stand
- 7 corrected. I did point out that that's outside my area of
- 8 expertise.
- 9 Q But you would agree, wouldn't you, Mr. Strome or the
- 10 others here on this panel, that there are far more on the
- 11 average unwinterized structures in the beach area without
- 12 basements than there tend to be, if you'll excuse the
- 13 expression, on the mainland?
- 14 A (Strome) I don't have that empirical data, but I
- 15 think that's a reasonable assumption.
- 16 MR. BACKUS: Thank you.
- JUDGE. SMITH: Any further examination by Intervenors?
- 18 Ms. Mitchell, do you have --
- 19 MS. MITCHELL: I just had one question.
- 20 CROSS-EXAMINATION
- 21 BY MS. MITCHELL:
- 22 Q I believe it'd be directed to Mr. Strome. On,
- 23 beginning on Monday with Mr. Traficonte you mentioned that you
- 24 had some potential shelters that would consist of public and
- 25 municipal buildings in the Hampton Beach area, and we discussed

- 1 that more as the days went on. Do you know whether or not
- 2 these buildings are public buildings in the sense that they're
- 3 owned by the community or whether or no hey're privately
- 4 owned and pe haps leased by the community?
- 5 A (Strome) I can't answer that question, I don't know.
- 6 Q Okay, thank you.
- 7 MS. SNEIDER: I have two questions to followup to Mr.
- 8 Brock's line of questioning.
- 9 RESUME CROSS-EXAMINATION
- 10 BY MS. SNEIDER:
- 11 Q I believe you stated in response to Mr. Brock that
- 12 the state may decide not to include all the buildings that
- 13 Stone & Webster listed in their study as potential shelters?
- 14 A (Bonds) That's a fair characterization, yes.
- 15 Q The state has no intention to label any of the public
- 16 buildings in the beach area to indicate that they may be used
- 17 as shelters, do they?
- 18 A (Strome) May we conference, please.
- 19 (Witnesses conferring)
- THE WITNESS: (Bonds) As I said before, at this time
- 21 until we've actually done our own study as to what's available
- 22 or not available. we have not made any decision to label
- 23 anything or to not label it.
- 24 BY MS. SNEIDER:
- Q Well, assuming, since you've no present intention to

- 1 label these buildings, the state does not include all of the
- 2 buildings that Stone & Webster included, how would the beach
- 3 area transients know which buildings that they are to shelter
- 4 in?
- 5 A (Bonds) I think what you pose is a logical question.
- 6 Given that we haven't done our study yet, we're going to have
- 7 to make some provision that if we find that there are buildings
- 8 that clearly the state does not believe to be acceptable, we're
- 9 going to have to deal with, what do we do then. I don't think
- 10 we can rule out the possibility that the decision may be that
- 11 they're going to have to be somehow designated, perhaps, not
- 12 accept ble as opposed to labeling others acceptable. We just
- 13 have not gotten to that level of detail yet in terms of doing
- 14 it. We just haven't done any study yet.
- 15 Q Well, do you think a commercial establishment in that
- 16 area would allow you to put a designation on their building
- 17 saying, this building is not acceptable?
- 18 A (Bonds) I prefer to be a long way away when this
- 19 gets done.
- 20 Q Just one question for you, Mr. Callendrello.
- I believe you stated in response to Mr. Brock that
- 22 sheltering would provide adequate protection for the beach
- 23 population because you do the best you can with what you have;
- 24 is that right?
- 25 A (Callendrello) That's my understanding of the

- 1 requirements for sheltering, yes.
- 2 Q So would it be the case that if there were no
- 3 shelters available that that would also provide adequate
- 4 protection?
- 5 A (Callendrello) What that would indicate is that when
- 6 you do the tradeoff between maximum dose savings and when you
- 7 look at the shelter side of the equation, it comes up with no
- 8 dose savings. When you look at the evacuation side it comes up
- 9 with some dose savings. Therefore in that case, the evacuation
- 10 action -- evacuation side would provide the maximum dose savings
- 11 and that would be the recommended protective action.
- 12 Q And that would be, in your opinion, therefore the
- 13 population would be provided adequate protection because it's
- 14 the best -- you're doing the best you can with what you have?
- 15 A (Callendrello) You're doing the best you can -- yes,
- 16 that's right.
- 17 Q Okay.
- 18 A (Callendrello) Yes.
- 19 JUDGE SMITH: Mr. Flynn?
- 20 MR. FLYNN: I have no questions, thank you.
- JUDGE SMITH: Mr. Turk?
- MR. TURK: I have a few followup clarification
- 23 questions. I would ask them from here, I don't know if the
- 24 witnesses can see me with Mass. AG sitting at the table. All
- 25 right, why don't I move to that table.

1	I thank Massachusetts for agreeing to sha	re a table
2	with me.	
3	(Laughter)	
4	CROSS-EXAMINATION	
5	BY MR. TURK:	
6	Q Gentlemen, my name is Sherwin Turk, I'm a	n attorney
7	with the NRC staff. I have only a few questions to	ask you by
8	way of followup to some questions that Intervenors	had asked
9	previously.	
0	First, Mr. Callendrello, there was some d	iscussion
1	two days ago, May 3rd, concerning the planning basi	s, and I
2	wanted to see, first of all, whether it's your unde	rstanding
3	that NUREG-0654 guides you to consider particular a	ccidents or
4	accident sequences in developing emergency plans?	
5	A Callendrello) No. it's my understanding	that NUREG-
6	0654 does not require you to consider particular ac	cident
7	sequences in designing emergency plans.	
8	Q Is it fair to say then that in questioning	g, in which
9	the use of the phrase "core melt accidents" came up	, and
0	whether or not the planning basis had to include or	did include
1	core melt accidents, that you're referring to what	NUREG-0654
2	included in the planning basis within that document	?
3	A (Callendrello) That is correct.	
4	Q Just one last question in that regard. I	take it

it's true then that neither New Hampshire Yankee nor the state

- 1 considered particular accident sequences in developing
- 2 emergency plans?
- 3 A (Callenarello) Speaking for New Hampshire Yankee,
- 4 that is correct.
- 5 A (Strome) And the state's position is the same.
- 6 Q The rest of these questions will relate to
- 7 questioning earlier today, and this is to Dr. Wallace. There
- 8 was a question concerning the meaning of a .9 dose reduction
- 9 factor, and at one point I believe you agreed that . 9 dose
- 10 reduction factor is equivalent to being outdoors 54 minutes out
- 11 of the hour; do you recall that line of questioning?
- 12 A (Wallace) I do recall the line of questioning and
- 13 some confusion about the 54 and the 6.
- 14 Q If I'm correct that the transcript indicates that you
- 15 agreed, this .9 dose reduction factor is equivalent to being
- 16 outdoors for 54 minutes, should I assume also that you -- that
- 17 implicit in your question -- I'm sorry, implicit in your answer
- 18 was an assumption that the plume was constant in its content
- 19 with speed and general character?
- 20 A (Wallace) les, that's correct. And I think I made
- 21 some -- I had a brief discussion of that, given some parameters
- 22 and we discussed some of that. But, yes, that was given
- 23 constant -- that's what it meant. Everything the same for an
- 24 hour.
- 25 Q Okay. And just one clarifying question in that

- 1 regard. When we refer to this .9 dose reduction factor, are we
- 2 talking about anything more than the cloud shine protection
- 3 factor? Do you know or I'll let you pass to Mr. MacDonald, if
- 4 you like?
- 5 A (Wallace) Maybe Mr MacDonald can supplement that.
- 6 But certain'y c'oud shine is the major consideration. I have
- 7 to think whether we're referring also to ground shine. But
- 8 primarily cloud shine is what you're considering in the dose,
- 9 you know, in the DRF.
- 10 Q Mr. MacDonald?
- 11 A (MacDonald) Dr. Wallace is correct, there is cloud
- 12 shine protection afforded by the structures as well, but the
- 13 intent from the planning basis is from a cloud shine basis, the
- 14 .9 protection factor is adopted.
- 15 Q That's the reference, .9 refers to the cloud shine?
- 16 A (MacDonald) Cloud shine, that's correct.
- 17 Q I believe Mr. Bonds indicated previously, and this
- 18 concerns the testimony on page 19, in the bottom portion of
- 19 that page you have listed certain circumstances in which
- 20 sheltering might be considered. And in discussing this earlier
- 21 today I believe you mentioned that one instance in which
- 22 sheltering might be considered is if there were impediments
- 23 during evacuation, and you gave various examples including fog,
- 24 snow, bridge conditions, road conditions, highway construction,
- 25 as I recall. And I wanted to get a clarification with respect

1	to your use of the term "bridge constructions bridge
2	conditions or road conditions," could you explain what you
3	meant by that?
4	A (Bonds) Well, if you're going through a major
5	exercise of putting a four land road in and making a turning
6	a two lane road into a four lane road, you're obviously
7	there's problems in moving traffic through it, it's not going
8	to be a smooth process. If those are sitting at key locations
9	and you know that you're creating a situation that's going to
10	tremendously hamper evacuation, then you're going to have to
11	take a good hard look at whether or not it's worthwhile
12	continuing that process.
13	Q Let's hypothesize that it's a hot summer weekend day,
14	mid-afternoon, large beach crowd and you have queue of cars in
15	the evacuation process. Did you mean to include that in the
16	use of the words, "Highway conditions?"
17	A (Bonds) No, I don't believe so.
1.8	(Continued on next page.)
19	
20	
21	
22	

et/70

23

24

25

1	MR. TURK: Your Honor, I have nothing further.	
2	JUDGE LINENBERGER: A couple of brief points by way	
3	of clarification.	
4	If I remember correctly, those structures included in	
5	the Revisions 1 of the Stone & Webster study were selected,	
6	among other reasons, because they provided at least, and I	
7	think this language is used somewhere, a 0.9 dose reduction	
8	factor.	
9	Is that a proper recap so far?	
10	THE WITNESS: (Callendrello) Yes, that's correct.	
11	JUDGE LINENBERGER: From photographic observations of	
12	from information that I have been exposed to, I have the	
13	impression that there may be some structures in the Stone &	
14	Webster listing still speaking of Revision 1 of August	
15	'87 that do better than 0.9. I don't know this to be a	
16	fact. I only surmise it.	
17	Can anybody authoritatively assure me that this is	
18	so, or tell me that this is so?	
19	THE WITNESS: (Callendrello) To the best of my	
20	knowledge, Your Honor, that is so. If you would like, I can	
21	ask Mr. Bell who is the author of both of those studies, and he	
22	can confirm that.	
23	JUDGE LINENBERGER: All right, let me go one step	
24	further before we get Mr. Rell into the act, and I have no	

25 objection to his comments here, but I'm leading up to something

- 1 a little beyond that.
- 2 That would say to me, just looking at the arithmetic
- 3 of the situation, that the average dose reduction factor for
- 4 all structures listed in the Stone & Webster study on the
- 5 average will be less than 0.9.
- 6 Is that a correct conclusion to draw.
- 7 THE WITNESS: (Callendrello) Yes, it is.
- 8 JUDGE LINENBERGER: Let's take it one step further.
- 9 If we, instead of talking about structure, talk about
- 10 numbers of people shelter units, these presumably being 10-
- 11 square-foot units, then I would conclude that the average dose
- 12 reduction factor across all people shelter units covered by the
- 13 Stone & Webster report would have a dose reduction factor on
- 14 the average less than 0.9.
- 15 Is that true?
- 16 THE WITNESS: (Callendrello) Yes, it is.
- JUDGE LINENBERGER: And the last step in this process
- 18 is to ask, and here I think I'll direct the question to --
- 19 well, I direct it to Mr. Callendrello and he can -- I care not
- 20 who answers.
- 21 Has a determination been made as to approximately
- 22 what is that average dose reduction factor for however many
- 23 structure people sheltering units there are included in the
- 24 Stone & Webster report?
- 25 THE WITNESS: (Callendrello) Sir, I'm not aware of

1	any. I can ask Mr. Bell, but I'm not aware of any.
2	JUDGE LINENBERGER: Mr. Bell, are you aware?
3	THE WITNESS: (Bell) No, but we provided the
4	information to the client in case they did want to do that.
5	JUDGE LINENBERGER: Do I understand correctly then
6	that average value is something that can be determined from
7	information in existence right now?
8	THE WIINESS: (Bell) Yes.
9	JUDGE LINENBERGER: Okay, let's but there is no
10	estimate of how much below 0.9 that average value might be; is
11	that correct?
12	THE WITNESS: (Callendrello) That is correct.
13	JUDGE LINENBERGER: Okay. Now let's change the
14	subject.
15	Again in conjunction with, at least today, some
16	photographic information, and at other times this week, there
17	have been some comments about the number of air changes per
18	hour that one might expect to experience within a given
19	structure. And I think I've heard the figure of two air
20	changes per hour having been quoted as a representative value.
21	My problem is that I can see air changes cutting both
22	ways. If there is no change of air, people sheltered in a
23	structure with no change of air at some point in time, and I
24	don't relate this to cloud passage in any quantitative way, but

25 at some point in time they're going to find it getting awfully

- 1 stuffy in there.
- 2 If there is a large number of changes of air or easy
- 3 flow rate of air through the building, the people sheltered in
- 4 that building may vary well find inflicted upon them
- 5 radioactive particulates brought in by air current movements.
- 6 So I ask the question in view of these two opposing
- 7 kinds of things, discomfort on the one hand and potential for
- 8 contamination on the other hand, is the two air changes per
- 9 hour an attempt to somehow compromise between those two
- 10 undesirable ends of this spectrum, or what is it?
- 11 And perhaps I should ask that question of Mr. -- I'm
- 12 sorry, I have forgotten your name for the moment.
- 13 THE WITNESS: (MacDonald) MacDonald.
- 14 JUDGE LINENBERGER: MacDonald. Forgive me sir.
- 15 THE WITNESS: (MacDonald) As I think I demonstrated
- 16 this morning. I'm not a heating and ventilation engineer.
- JUDGE LINENBERGER: Fair enough.
- 18 THE WITNESS: (MacDonald) But incorporated into the
- 19 decisionmaking criteria of the New Hampshire plan is an air
- 20 exchange rate of two changes per hour. You are correct in that
- 21 citation.
- There was a choice to make, based on the larger
- 23 algorithm that applies to that concept of interior dose from an
- 24 air change situation, and the value of two air changes per hour
- 25 was selected as representative of the types of structures that

- 1 would be used for shelters in the Seabrook Station EPZ area.
- 2 I'm not aware of any balancing -- maybe the state can
- 3 comment further -- I'm not aware of any balancing between the
- 4 two extremes that you represented.
- 5 You're true and you're correct in the fact that that
- 6 kind of balancing is involved in making that air change
- 7 selection. I can't represent anything further than that
- 8 actually, and I don't know whether the state can add whether
- 9 there was any balancing act that was --
- JUDGE LINENBERGER: Can any of you gentlemen provide
- 11 guidance here on this point?
- 12 THE WITNESS: (Callendrello) One point of
- 13 clarification.
- 14 The number of air changes per hour reflects into --
- 15 is reflected in the inhalation dose reduction factor that has
- 16 been assigned to what is in essence some of the worst
- 17 structures on a par with the dose reduction factors of 0.9
- 18 selected for whole body.
- And that is, we would expect any if not all of the
- 20 structures to have at least as good an air exchange rate and
- 21 consequently an inhalation dose reduction factor as that.
- 22 So it is selected to provide a boundary so that we
- 23 can make a dose -- a protective action assessment and come up
- 24 with a protective action recommendation.
- JUDGE LINENBERGER: I hear your words, but I think I

- 1 have a problem with your message.
- 2 You say at least as good as that, and I presume the
- 3 "that" you're talking about is the two air changes per hour.
- 4 But when you say at least as good as that, I get confused.
- 5 because is "good" with reference to people not feeling too
- 6 stuffy too soon? Or is "good" with reference to people not
- 7 having a source of inhalation?
- 8 (Board confers.)
- 9 THE WITNESS: (Callendrello) Good in the terms that
- 10 I'm using it means fewer air changes per hour which would
- 11 reduce the amount of mixing of outside air with inside air over
- 12 time.
- JUDGE LINENBERGER: Back to you, Mr. MacDonald.
- 14 Did I understand an earlier comment of yours to say
- 15 that rather than choosing two on the basis of balancing, two
- 16 was the result of sort of an average expectation for the
- 17 structures in the Stone & Webster survey?
- I thought I heard that from you, but I'm not sure.
- 19 THE WITNESS: (MacDonald) Yes, you did hear that
- 20 from me, and that -- the reference on that is an EPA guidance
- 21 document. Actually it's the EPA PAG manual, and there is a
- 22 page reference, 1.38, that expresses the dose reduction factor
- 23 internal to a structure based on an air exchange rate.
- And then using that expression evaluated at two air
- 25 changes per hour, I've just worked out some mathematics that

- 1 shows on topical New Hampshire state plan usage of shelters,
- 2 typical time frames on the order of one to four hours, we're
- 3 dealing with potential factors internal that are equivalent to
- 4 the .9 external.
- 5 JUDGE LINENBERGER: Thank you, gentlemen.
- 6 JUDGE SMITH: Mr. Lewald?
- 7 MR. LEWALD: No redirect.
- 8 JUDGE SMITH: Any questions on Judge Linenberger's
- 9 questions?
- 10 MS. SNEIDER: I have some questions.
- JUDGE SMITH: You do?
- 12 RECROSS EXAMINATION
- BY MS. NEIDER:
- 14 Q The Stone & Webster study prepared in March 1986
- 15 contained, to the best of your knowledge, all the available
- 16 space that had in excess of .9 dose reduction factors; is that
- 17 correct, or better dose reduction than the .9?
- JUDGE SMITH: .9 or more.
- MS. SNEIDER: Provided better shielding.
- THE WITNESS: (Callendrello) The March 1986 Stone &
- 21 Webster report indicated gross space and adjusted gross space
- 22 in buildings that had a shielding factor that was numerically
- 23 lower. In other words, provided better dose reduction than .9.
- 24 BY MS. SNEIDER:
- 25 Q Okay. And --

- JUDGE SMITH: Better than or . 9 and better? 1
- 2 THE WITNESS: (Callendrello) No, better than .9.
- 3 JUDGE SMITH: Better than . 9.
- THE WITNESS: (Callendrello) Equivalent to masonry
- 5 or wood frame with a basement.
- JUDGE LINENBERGER: But I think there still may be a 6
- 7 semantic hang up here.
- Better than . 9 means less than . 9. I believe. 8
- 9 THE WITNESS: (Callendrello) Yes, it does.
- 10 JUDGE LINENBERGER: Thank you.
- 11 BY MS. SNEIDER:
- Okay, and do you have that study with you, the March 12
- 13 1936 study?
- (Callendrello) No, I don't. 14
- Well, if you would like, I'll give you the Ltudy. 15
- I've written down the figure. 16
- (Callendrello) Okay. 17
- And the total square footage of available shelters 18
- with less than . 9 dose reduction factor for Scabi ok Be ch area 19
- 20 I believe was 26,550 square feet; is that correct':
- A (Callendrello) les, that's correct. 21
- And the total square footage in that study for 22
- shelter with less than .9 dose reduction factor for Hampton is 23
- 283,580 square feet; is that correct? 24
- A (Callendrello) Yes. 25

- 1 Q And the total square footage for those two towns
- 2 equals 310,130 square feet; is that right?
- 3 I'm just adding those two numbers.
- 4 A (Callendrello) That looks close if it's not exactly
- 5 right on. I haven't added them up, but that sounds very close.
- 6 Q So, to the best of your knowledge, that number of
- 7 310,130 square feet equals the total square footage available
- 8 in shelters having less than .9 dose reduction factor in those
- 9 two beach areas.
- 10 A (Callendrello) Again, at the risk of sounding like
- 11 an IRS form, that is the adjusted gross square footage.
- You are using the term "available". As we indicated,
- in the later Stone & Webster study there was a listing of
- 14 available square footage where the adjusted gross square
- 15 footage had an availability factor applied to it.
- 16 Q I understood, and maybe Mr. Bell can answer my
- 17 question, that the totals provided in that study was all the
- 18 square footage; that they weren't reduced -- that the bottom
- 19 line was not reduced there.
- 20 A (Callendrello) It was not reduced in the individual
- 21 town tables. But if you look at the text on page 7 of the
- 22 August 1987 Stone & Webster study --
- 23 Q I'm talking about the March '86 study now.
- 24 A (Callendrello) I've lost your question.
- 25 Q Well, perhaps Mr. Bell can answer that best.

- A (Bell) I'll try to basically describe in a few sentences the process and the reason.
- 3 First of all, in the Aldrich reference in the case of
- 4 masonry buildings and basements, they advise staying away from
- 5 doors and windows to achieve those factors. In the case of
- 6 wood frame, they do not make that comment.
- 7 So, in the case of masonry and basements, when the
- 8 health physicist went around and looked at these buildings, he
- 9 reduced the total area of buildings by percentages based on his
- 10 judgment as to what part of it would provide the dose reduction
- 11 factors that he was putting down on the individual form.
- 12 If he had wanted to include more area, he would have
- 13 had to make the numbers go higher toward one.
- 14 Q Okay.
- 15 A (Bell) So we were looking to keep those numbers in
- 16 the range provided by normal masonry and basement buildings.
- 17 Then, when we got through that part of it, we ended
- 18 up with total areas. Then we said, and we didn't specifically
- 19 say it in the text, but the reason in this document of using 10
- 20 to 20 square feet per person was to allow for the fact that
- 21 there was things in the way inside the buildings.
- We got a little more sophisticated in the August '87
- 23 report by using availability factors.
- 24 Q Okay.
- 25 A (Bell) Which, if you average it all out in the '87

report, comes out to something like 17 square feet per person 1 2 on the gross basis which falls in the 10 to 20 square feet per person range we used in the first study on a more simple 3 manner, in a more simple way. That's why we listed a range of 4 people that could possibly be sheltered. Q Okay. I understand that. But the total square 6 footages given is the total square footage available that falls 7 within that --8 9 A (Bell) Within the shielding. Q That is within those shielding parameters of that 10 study which is less than .9. 11 A (Bell) That's right. That are written on the 12 individual shelter survey forms that we supplied to New 13 14 Hampshire Yankee. Okay. Now the major difference between the first 15 study and the second study is that the second study included 16 all those buildings that had .9 dose reduction factors; is that 17 18 correct?

T71 19 (Continued on next page.)

20

21

22

23

24

- 1 A (Beli) Except any that might have changed such as
- 2 burned down or being torn down in the meantime.
- 3 Q Right.
- 4 A (Pell) And I think we did miss a few. So there are
- 5 a few that have been added.
- 6 Q Do have that second study, Revision 1 before you?
- 7 A (Bell) Yes.
- 8 Q And turning to the Town of Seabrook it provides a
- 9 total 70,870 square feet; is that right?
- 10 MR. DIGNAN: Your Honor, is this recross or
- 11 something? I didn't understand any of the questions Ms.
- 12 Sneider's last round to open up this line of interrogation.
- MS. SNEIDER: It goes directly to Mr. Linenberger's
- 14 questions to the panel on, about the average dose reduction
- 15 factor being better than .9.
- 16 MR. DIGNAN: Do you challenge that it's, quote.
- 17 "Better than .9" or less than .9 as the witness testified?
- MS. SNEIDER: Yes, I am. And I think this line of
- 19 questioning is going to demonstrate that very clearly.
- 20 JUDGE SMITH: Would you explain your arithmetical
- 21 theory.
- MS. SNEIDER: Well, the bottom line is that, the
- 23 second study had 1,446,780 square feet when they included the
- 24 shelters with the ,9 dose reduction factor. The first study
- 25 had a total of 310 square feet when they didn't include that

- 1 area. So I fail to see how the panel can say that the average
- 2 building in the area provides better than or less than .9 dose
- 3 reduction factor on those figures alone. That a exactly where
- 4 this is going.
- 5 MR. DIGNAN: One million four plus 300 with higher
- 6 factors than 300 has to lead to that conclusion, counselor. I
- 7 object. That's as good as two plus two equals four, Your
- 8 Honor.
- 9 MS. SNEIDER: 310,000 square feet they've testified
- 10 is available with -- that provides better shielding than .9.
- 11 MR. DIGNAN: Right.
- MS. SNEIDER: 1,446,000 is the total and they include
- 13 .9. I subtract the 310,000 from the 1,446,000 and I get that
- 14 there's 1,136,850 square feet that is dose reduction factor of
- 15 . 9.
- MR. DIGNAN: Agreed.
- 17 MS. SNEIDER: Compared to 310,000, that is a dose
- 18 reduction factor that's less than .9.
- 19 MR. DIGNAN: Agreed. And so the average is less than
- 20 .9 like the witness testified.
- MS. SNEIDER: I take it from that the average
- 22 structure in the area is .9.
- MR. DIGNAN: Fact of the finding.
- MR. TURK: Your Honor, I think it's an unnecessary
- 25 argument, the state wants to use a .9 dosc reduction factor and

- 1 Ms. Sneider doesn't want them to use anything less. So what's
- 2 the argument.
- 3 MS. SNEIDER: Well, I thought there might have been a
- 4 misimpression left after that line of questioning, that there
- 5 were more space -- there was more space available in the area
- 6 more than . 9. And I just wanted to make it very clear that the
- 7 large majority of the space is only a .9; and that's where this
- 8 line of questioning is going, that's all.
- 9 JUDGE SMITH: You're completed?
- MS. SNEIDER: Well, if Mr. Dignan wants to stipulate
- 11 to those final figures, I'm completed.
- MR. DIGNAN: I don't know whether it's good or not.
- 13 I just don't know how one number is one and another number is
- 14 higher, somehow the average is higher than one, but they do --
- 15 the Attorney General does figures the way I don't, so we'll see
- 16 where it comes out.
- 17 JUDGE SMITH: I did not follow your arithmetic. I
- 18 thought I was following your logic. If none -- none of the
- 19 figures are higher than .9 and some of the figures are less
- 20 than .9, I don't care what your arithmetic is, the average is
- 21 going to be less than .9.
- MS. SNEIDER: Excuse me, I just thought there may
- 23 have been a misimpression that the average building that you
- 24 would go into had a better than .9, not that -- if you totalled
- 25 them all up together and then multiplied them, just that the

- 1 average structure --
- 2 JUDGE SMITH: The mean structure?
- 3 MS. SNEIDER: The average building that you go into.
- 4 and the EPZ does have a .9 dose reduction factor.
- 5 JUDGE SMITH: I don't think that this record is going
- 6 to be improved by any dialogue between you and me.
- 7 (Laughter)
- B JUDGE LINENBERGER: Very briefly, gentlemen, and
- 9 let's get away from .9s. I should like to inquire of the
- 10 employee of Stone & Webster and/or of Mr. Callendrello, whether
- 11 there have been any psychological or however you want to
- 12 characterize them, recommendations with respect to the, let's
- 13 say, acceptability of 10 square feet per person that has been
- 14 used in making some of these calculations. I personally think
- 15 I would go bonkers if I were required to stay within 10 square
- 16 feet very long, but I'm not an average person, I'll admit that.
- 17 So let me ask, was there any psychological or
- 18 psychiatric consultation to bolster the acceptability of that
- 19 figure?
- 20 THE WITNESS: (Callendrello) Judge Linenberger, the
- 21 justification for the 10 square feet per person comes from a
- 22 FEMA document entitled radiation safety and shelters which, as
- 23 I understand it, is a -- I'll call it a nuclear war or World
- 24 War III shelter document.
- I do not know all of the factors that have gone into

- 1 it, but I do know that persons who are trying to determine the
- 2 availability and capacity of shelters are instructed to divide
- 3 the total available space and square feet by 10, the number of
- 4 square feet allowed for per person.
- And further as an instruction it says: "If the
- 6 number is smaller than the number of shelter occupants, it may
- 7 be necessary to crowd people temporarily in the safer
- 8 locations. The number of people in the safer locations can be
- 9 doubled if you crowd them temporarily by squeezing down the
- 10 space per person from 10 square feet to five square feet."
- 11 Understanding that the state's shelter strategy is a
- 12 temporary shelter option and not a long-term congregate care,
- 13 overnight, long-term care shelter. I think that that number
- 14 has some basis, I do not know everything that went into that
- 15 number.
- JUDGE LINENBERGER: Well, I'm going to object if I
- 17 find myself in less than a three-by-three cubicle, but so be
- 18 it.
- 19 (Laughter)
- JUDGE SMITH: All right. Anything further for this
- 21 panel?
- MR. BACKUS: Well, I have something further, Your
- 23 Honor, and that is, I'd like to make a motion to strike the
- 24 testimony as a result of all this examination on pages 19, the
- 25 first full paragraph through 21 down to the description of the

- 1 Stone & Webster study. Those pages have been the subject of
- 2 much examination and much testimony here.
- 3 Basically what they talk about is sheltering as a
- 4 protective action response for the beach population. And I
- 5 submit, and I'm not going to take a lot of time on it, but what
- 6 we've learned here this week is that there is no plan for
- 7 sheltering. It's a plan in name only. There are no identified
- 8 shelters. There are no implementing procedures. And when we
- 9 pressed the witnesses on this we get only the response that
- 10 it's a very limited protective response, we don't think it's
- 11 likely, evacuation is much the preferred option. Fine, we
- 12 understand that.
- But the state has claimed to have sheltering, in
- 14 limited circumstances as a planned response as part of the
- 15 emergency plan, and I just don't think this testimony, now that
- 16 we've not only seen the prefiled, but heard the testimony on
- 17 the cross-examination, rises to the level that this Board can
- 18 consider as in any way providing a planned response.
- I even heard one of these witnesses this afternoon
- 20 use the term "an ad hoc response" in regard to the sheltering.
- 21 So I respectfully submit that the state has not or
- 22 the Applicant as the sponsor of this testimony has not made a
- 23 prima facie showing. That what we have from the state, in any
- 24 way, rises to the level of a plan that could be considered to
- 25 meet any regulatory requirement, however, the regulatory

- 1 requirements may ultimately decided in this case.
- 2 It certainly does require a plan. And I submit, all
- 3 we have is a plan in name and none in fact.
- 4 MR. BISBEE: Excuse me, Your Honor --
- 5 MR. DIGNAN: I get the feeling, Your Honor, that I
- 6 just heard a good speech to make the 5 o'clock edition of the
- 7 Globe, but I --
- 6 MR. BACKUS: No, you didn't, Mr. Dignan.
- 9 MR. DIGNAN: -- but I don't see --
- 10 MR. BACKUS: Frankly, I resent always being accused
- 11 of that every time I speak. I'm making a motion because I
- 12 think it has merit.
- MR. DIGNAN: I don't do that every time, Bob.
- MR. BACKUS: Oh, you do, almost every time.
- MR. DIGNAN: But the point is, Your Honor, I don't
- 16 see that as one of an argument for a motion to strike
- 17 testimony or even to exclude testimony. It may be a good
- 18 argument to make some day to the Board that certain testimony
- 13 should not be agreed with or basis -- maybe he's going to ask
- 20 the Board for finding that shelter isn't an option at Seabrook.
- 21 I don't know. But it's hardly an argument of any basis that I
- 22 ever heard of since law school for excluding evidence.
- 23 It's an argument that you shouldn't give any weight
- 24 to the evidence. That is not an argument for excluding it.
- JUDGE SMITH: That belongs in your proposed findings,

- 1 Mr. Backus. It's not basis to strike the testimony.
- 2 MR. OLESKEY: Well, if I just may say something on
- 3 that, Your Honor. Where the testimony that's adduced on cross-
- 4 examination so undermines the substance of what was claimed in
- 5 the prefiled, I think you do have an unusual circumstances
- 6 where a motion to strike and not simply a request for a finding
- 7 later on, account of weight is appropriate.
- 8 I think what Mr. Backus has said, and I join in it,
- 9 is that the plan, so-called, is conceptual and not real. And
- 10 as such so much of the testimony as asserts that there is a
- 11 plan rather than a concept should not stand.
- 12 And he's named -- he specified approximately a page
- 13 which asserts that in the plan there's something that's
- 14 supported by the testimony. I think that the burden of the
- 15 cross-examination which is obviously has been extensive is that
- 16 there is a concept in the testimony but nothing in the plan
- 17 behind it that amounts to that other than in a very sketchy and
- 18 conceptual fashion-
- 19 I don't think, therefore, it's necessary to wait for
- 20 finding sometime down the line, but appropriate to address it
- 21 now. And that's why I take it, ... Backus did so and that's
- 22 why I join in support of that motion.
- 23 MR. DIGNAN: In answer to that, Your Honor, if my
- 24 brother thinks the cross-examination of the last three and a
- 25 half days, quote, "undermine this testimony extensively," we

- 1 were in different courtrooms; that's my short answer to that
- 2 approach.
- 3 JUDGE SMITH: Given -- accepting your argument, Mr.
- 4 Oleskey, that it's not impossible, that you could have a
- 5 situation where a statement or a group of statements or an
- 6 entire document on behalf of a person who has the burden of
- 7 proof, so utterly fails on cross-examination you should strike
- 8 it.
- 9 But what we have here by Mr. Backus is a very, very
- 10 broad-brush motion to strike. A very large part of testimony
- 11 covering many thoughts, very thought intensive part of
- 12 testimony on the basis of an undescribed two and a half days of
- 13 testimony. It's too broad. It's too unfocused. It belongs in
- 14 proposed findings.
- 15 Even the motion to strike can be made in proposed
- 5 f idings, if that's what he wants. But you just can't hold up
- 17 two and a half days of testimony as against all these pages of
- 18 thought intensive testimony and say, throw it out. So on that
- 19 basis, we made no ruling that you're not entitled to ultimate
- 20 relief to what you seek on proposed findings. You're just not
- 21 entitled to the shotgun relief you seek right now. It would
- 22 take the two and a half days to argue it. So your motion is
- 23 denied. I understand you did object to it, and it is denied.
- 24 Anything further for this panel?
- 25 (No response)

1	JUDGE SMITH: All right, gentlemen, thank you.
2	(The witnesses were excused.)
3	JUDGE SMITH: What is the pleasure of the parties for
4	the balance of the afternoon other than go home?
5	MR. OLESKEY: I think it's being discussed, we should
6	have an answer in a moment.
7	JUDGE SMITH: Do you want a break, short break?
8	Would it be a good idea to take well, what's the proposal?
9	MR. BROCK: I'd like to put the Hampton witnesses on,
10	Your Honor, I'm being told they may be able to finish them by
11	the end of the day
12	MR. DIGNAN: Are you going to put on Representative
13	Hollingworth first?
14	MR. BROCK: I'd like to put them all three together.
15	MR. DIGNAN: Put her on separately.
16	MR. BROCK: I'd like to put them all three together.
17	If you want to cross them separately, you're welcome to.
18	MR. DIGNAN: I want to cross and object separately,
19	and Ms. Selleck is handling the other witnesses. Now, you gave
20	it to us as a separate witness. I don't care if people sit
21	beside her, but put that in and let's deal with it on the
22	record.
23	(Whereupon, a brief recess was taken.)
24	
25	

1	Whereupon,
2	THOMAS MOUGHAN
3	BEVERLY HOLLINGWORTH
4	JEAN LINCOLN
5	having been first duly sworn, was called as a witness herein.
6	and was examined and testified as follows:
7	MR. BROCK: Your Honor, at this time, as per your
8	procedure, at the panel table are Representative Beverly
9	Hollingworth, Thomas Moughan, and Jean Lincoln.
10	The Applicant has requested and I do not object to
11	having the cross proceed on Representative Hollingworth first,
12	completing that and then proceeding to the other two, if that's
13	acceptable.
14	JUDGE SMITH: Let's do that.
15	MR. TURK: Your Honor, I have a point I'd like to
16	note for the record. Until five minutes when we broke, it was
17	my impression that the order of procedure would be
18	Representative Hollingworth followed by the Massachusetts
19	Attorney General's large panel of Goble Renn, et al. And
20	that's the way I prepared; and those are the representations
21	made to me.
22	The request from the Town of Hampton specifically,
23	would I mind if Representative Hollingworth was taken out of
24	turn, i.e., in advance of the Mass. AG's witness, and I said,
25	no, that would be all right.

10785

1 Until five minutes ago nobody told me we're going to

- 2 be examining Moughan and Lincoln. Now, frankly, I'm not
- 3 prepared to cross-examine them today. And if the Town of
- 4 Hampton wants those two individuals dismissed by the end of the
- 5 day, I can't agree to that.
- 6 MR. BROCK: Your Honor, could I just --
- 7 JUDGE SMITH: I don't think it's going to happen
- 8 anyway, in any event. I don't know how much cross-examination
- 9 Mr. Dignan has of that panel, but I don't see how we're going
- 10 to get that panel done by the end of the day.
- MR. BROCK: I'd like to clarify one point. Most of
- 12 what Attorney Turk stated I agree with. 'I did ask that
- 13 Representative Hollingworth be called out of turn, i.e., have
- 14 the Applicant panel step down so she could be called, so she
- 15 could go to New York. She has canceled that engagement in
- 16 order to be here now. And that was the substance of my
- 17 conversation with Mr. Turk.
- 18 MR. TURK: I didn't mean to imply that there was an
- 19 expressed representation that -- I'm sorry for stating it that
- 20 way, that she would come before the Mass. AG's panel, but it
- 21 had never been my understanding that these other two witnesses
- 22 would come before the Mass. AG's panel. My understanding was
- 23 exactly the opposite, that it would be Hollingworth and then
- 24 Mass. AG's big panel.
- JUDGE SMITH: Well, you speak up for relief when you

- actually need it. I doubt if it will come up. 1
- 2 DIRECT EXAMINATION
- 3 BY MR. BROCK:
- Q Representative Hollingworth, for the record would you
- 5 state your name and address, please?
- 6 A (Hollingworth) Beverly Hollingworth, 209 Winnacunnet
- 7 Road in Hampton Beach.
- 8 And on behalf of the Town of Hampton through counsel.
- 9 have you submitted testimony in this proceeding?
- 10 A (Hollingworth) Yes, I did.
- And is that testimony true and accurate to the best 11
- 12 of your knowledge and belief?
- (Hollingworth) Yes, it is. 13
- Q At this time would you like the Board to admit that 14
- testimony and have it bound into the transcript? 15
- A (Hollingworth) Yes, I would. 16
- 17 MR. BROCK: So moved, Your Honor,
- MR. DIGNAN: I object, ask to be heard, Your Honor, 18
- on the Hellingsworth testimony, I will try to make this motion 19
- as clear as I can. Beginning with the words "In September 20
- 1987" on page one and down through the remainder of that 21
- paragraph, I object to the admission of that testimony on the 22
- 23 ground that it is rank hearsay.
- Starting with the words "I believe" directly 24
- thereafter. I object to the -- and running down through to the 25

- 1 end of the carry over paragraph that ends "Large segments of
- 2 the population," I object to that portion on the grounds that
- 3 it purports to express opinions really in the areas of
- 4 psychology and sociology and the witness is not competent to
- give such opinions.
- JUDGE SMITH: Your first objection to hearsay, where €.
- 7 does it end?
- 8 MR. DIGNAN: It ends at the end of the paragraph in
- the middle of page two. In other words, the last line being 9
- "Their families or members of the public from radiation." 10
- Then I pick up the next one and object to that --11
- 12 JUDGE SNITH: Wait a minute.
- MR. DIGNAN: -- on the grounds of competency because 13
- it purports to express certain opinions. And then there's --14
- JUDGE SMITH: Wait a minute. Can we take one at a 15
- 16 time?
- MR. DIGNAN: Yes, Your Honor. 17
- MR. BROCK: May I be heard, Your Honor. 18
- JUDGE SMITH: Just a moment, because I want to --19
- MR. BROCK: Oh, I'm sorry. 20
- JUDGE SMTTH: -- get more fumiliar with the material. 21
- 22 Okay, you may be heard.
- MR. BROCK: Thank you, Your Honor. As I understand 23
- the objection, the sole basis is hearsay. I'm sure the Board 24
- is aware the issue is whether that hearsay is reliable. 25

1	Representative Hollingworth is the elected
2	representative of these individuals to which he refers in that
. 3	portion of the testimony, they specifically contacted her to
4	express their anger and frustration that what had gone on as
5	far as designating these shelters.
6	She is here, I think wholly appropriately to present
7	their views to this Board as the elected representative. I
- 8	certainly think it's reliable and it should be admitted.
9	(Board conferring.)
10	(Continued on next page.)
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
2.3	
24	
. 25	

et/72

- JUDGE SMITH: In making our ruling, first, we
- recognize from several aspects -- from Representative 2
- 3 Hollingworth's limited appearance statement, from our
- appearance on another panel, and from letters she has 4
- written -- that in addition to being a state representative, 5
- she is an active opponent to the Seabrook Station. To the 6
- 7 extent that she received communications in her capacity as
- state representative, and to the extent that those 8
- communications were not solicited by her, but just were 9
- generated and received in the normal course of her duties as a 10
- state representative, even though they are hearsay, they are a 11
- 12 customary way in which information is imparted to a state
- representative, and we believe it has all of the elements of 13
- 14 reliability, and the routine nature of your business as
- representative to accept it. 15
- 16 However, when we get down into the testimony where
- she has generated information, then we will give a different 17
- look at it. But this paragraph that is in mind here, I assume 18
- that this is just passively received by you, Ms. Hollingworth, 19
- 20 as a representative.
- THE WITNESS: (Hollingworth) It is. 21
- JUDGE SMITH: Now, is any part of this you went out 22
- and solicited? 23
- THE WITNESS: (Hollingworth) Could I just speak 24
- 25 before you --

- JUDGE SMITH: Yes.
- THE WITNESS: (Hollingworth) I wanted to address
- 3 that.
- In the beginning, I received numerous phone calls.
- 5 What I got a little concerned half-way through, around
- Christmas time, I wrote to the business members of the Chamber 6
- 7 of Commerce who were close, personal acquaintances, friends of
- mine, and I have a letter in my file. 8
- 9 At no time in the letter do I express any opinions on
- how this should be done. I just notified them that they 10
- were -- had they been aware that there had been listed as 11
- shelters, and that I had received many letters, and that I 12
- would like to have any letters and any information from them in 13
- writing if they were to take and ask me to represent them, 14
- because I felt that, having been at the hearings and having 15
- heard some of Mr. Dignan's arguments on hearsay, I wanted to be 16
- prepared with letters in writing. So I did receive many 17
- letters. Perhaps out of the 100 more than half of those 100 18
- people wrote to me in writing. Several other older people 19
- called me on the phone, and said that if they needed to be in 20
- writing, they would request it. But that is the extent of my 21
- writing to anyone. 22
- JUDGE SMITH: I'll ask that you modify your testimony 23
- to include -- to be limited to those individuals who 24
- spontaneously contacted you. 25

	MOUGHAN, HOLLINGWORTH, LINCOLN - DIRECT 10791
1	THE WITNESS: (Hollingworth) That would be
2	JUDGE SMITH: If you can do that.
3	THE WITNESS: (Hollingworth) I would like to try. I
4	would have to look at my files and see what the number is,
5	but
6	JUDGE SMITH: Could you just give us an estimate?
7	THE WITNESS: (Hollingworth) Well, I'd probably
8	say
9	JUDGE SMITH: Would the result change?
10	THE WITNESS: (Hollingworth) No.
11	JUDGE SMITH: Okay. But just give us an estimate and
12	try to adjust it.
13	THE WITNESS: (Hollingworth) I would say
14	approximately 90 percent, or somewhere in that vicinity, people
15	who contacted me spontaneously.
16	JUDGE SMITH: All right.
17	MS. WEISS: Mr. Chairman, may I be heard?
18	I don't think it's going to have much practical
19	significance given the answer that the witness just gave to
20	you. But to the extent that it's been suggested that hearsay
21	is inadmissible if the conversation was initiated by someone
22	whose opposition to Seabrook is know, I would like to state
23	right now
24	JUDGE SMITH: That's not by any means our ruling.

25

That's not our ruling.

- MS. WEISS: All right, because I would just point out 1 that this last panel testified substantially to hearsay when we 2 had pages and pages of hearsay about what different employees 3 at Stone & Webster did, or may do, and what different employees of the state may do or may not do, or have done. And those are 5 people that are paid to present the views of the utility. 6 7 And I would just want to, you know, protest any suggestion of a double standard. 8 9 MR. DIGNAN: Your Honor, the reason I make the hearsay objection is I am aware as anybody in this room that 10 11 hearsay can be admitted in a NRC proceeding. My problem with this is here I've got supposedly 100 12 individuals who among other things have said they will leave no 13 matter what happens. Now I can see the proposed finding coming 14 down the pike and citing this testimony. At least 100 owners 15 of public businesses will leave no matter what. 16 Now, I'm not going to -- unlike the other study 17 that's coming in behind from Hampton, where you will not hear a 18 hearsay objection from this corner of the room, it's not 19 documented, I don't know who supposedly said this, who they are, whether they still are owners of anything, and this is 21 why, when I made the objection, and I'm not trying to go at the 22
- I mean I'm sure Ms. Hollingworth is going to, if I 25

of hearsay, and it destroys any right to do it.

23

24

veracity of Representative Hollingworth. This is the rankest

- cross-examine her on this, adhere to the position that at least 1
- 100 people called her and said this. I would expect her to do 2
- that. But I have no crack at them on this question of would 3
- they really bail out as soon as things happened, and this is my
- 5 difficulty.
- And unlike the other study that's coming in behind 6
- it, there's no documentation of who's involved, what's 7
- involved, and so forth, and this is my problem with it. 8
- 9 There are limits --
- MR. BROCK: Your Honor. 10
- MR. DIGNAN: There are limits --11
- JUDGE SMITH: I understand the problem that you have 12
- with it, and I understand the problems that might be attached 13
- to the weight of it. But understand what our ruling is. 14
- 15 Representative Hollingworth, no one disputes, is a
- representative. I can attest from my own experience that 16
- elected representatives in a routine w receive many telephone 17
- calls from constituents. It is a normal part of the business. 18
- It is how information is imparted to them. It is routine. 19
- The fact that she is known as an anti-Seabrook 20
- activist does not take away her status as a representative. 21
- MR. DIGNAN: I couldn't agree more. 22
- JUDGE SMITH: So the information that she gathered in 23
- the normal way that representatives gather information, 24
- spontaneous calls from her constituents is not going to be 25

- barred because of the hearsay rule. 1
- 2 Now the weight that will be given is one thing, but
- 3 it will not be barred because of the hearsay rule. We make a
- distinction as to what as a Seabrook opponent representing her
- own points of views went out and generated and what she may
- 6 have solicited.
- 7 MR. DIGNAN: All right. I understand the ruling.
- JUDGE SMITH: It's a very routine way in which a 8
- 9 representative receives information. It's very traditional.
- MR. DIGNAN: Your Honor, I understand the ruling, and 10
- I acquiesce, if you will. At least I don't wish to be heard 11
- further on this first objection. 12
- 13 MR. OLESKEY: He's subsiding, Your Konor.
- MR. DIGNAN: I'd rather subside than give up. 14
- All right, Your Honor, the next paragraph which 15
- begins on Page 2, "I believe that Stone & Webster's," and over 16
- until that paragraph ends on Page 3, I object to that on the 17
- grounds that it expresses opinions of this witness in the areas 18
- I would say of psychology, sociology, and whatever, and are 19
- opinions that I have not seen a sheet of qualifications that 20
- she's competent to make. 21
- I object to that testimony on the grounds of 22
- 23 competency.
- MR. BROCK: Your Honor, may I be heard? 24
- The atmosphere of fear, disbelief and mistrust to 25

- which Representative Hollingworth refers based on the way these 1
- potential shelters was designated was, as she has just stated 2
- to the Board, the result of spontaneous communications to her, 3
- and she is reporting that to this Board. 4
- To say that she is not competent to simply convey the 5
- emotions of her constituency, frankly, I don't understand that 6
- argument. That is her job as a representative. 7
- MR. DIGNAN: Your Honor, I --A
- 9 MR. BROCK: And she is doing that in this case, and
- the alternative. Your Honor, would be for us to, you know, 10
- bring in a parade, and we are trying to, in as concise a 11
- fashion as we can, bring our position to the Board's attention. 12
- 13 We think we have done that through the appropriate
- 14 representative.
- MR. DIGNAN: Your Honor, the testimony unfortunately 15
- doesn't do what my brother says. The testimony says, I 16
- believe. I believe that Stone & Webster's designation of 17
- shelters without consent and so forth, has exacerbated an 18
- atmosphere of fear. This is her opinion. It does not purport 19
- to be a quote from somebody else. It is her giving 20
- psychological, sociological opinions, and I see no grounds that 21
- 22 she's competent to give it.
- THE WITNESS: (Hollingworth) May I speak? 23
- JUDGE SMITH: No. You may consult with Mr. Brock if 24
- 25 you wish.

what happened is permitted to present his opinion as to what

- transpired. This is an opinion as to the psychological 1
- 2 composition of persons in the area.
- 3 JUDGE SMITH: Well, if 90 people call you up and tell
- 4 you that they are upset because they have been designated as
- 5 the owner of a potential shelter without their consent, and
- 6 they fear and disbelieve and mistrust the Applicants, then I
- 7 think that if you formed the opinion that that is the case, you
- 8 have, by virtue of your observations, been competent to form
- 9 that opinion, and there is nothing in the rules of evidence
- 10 that requires that all opinions be expressed by an acknowledged
- 11 expert on the subject.
- 12 If this is something that she would as a layman
- normally observe and be able to express an opinion, it would be 13
- 14 competent.
- 15 However, I don't see the whole paragraph, and I want
- to consult with my colleagues. 16
- MR. DIGNAN: Your Honor, in response to Your Honor's 17
- remark. I would just point out my difficulty is this is not a 18
- statement that these people told me I mistrusted the utility. 19
- This is a statement, I believe that what Stone & Webster did 20
- has exacerbated the atmosphere of fear, disbelief and mistrust 21
- that pervades the beach population concerning the Seabrook 22
- 23 Station.
- 24 It's an opinion by her that people have been affected
- 25 by something Stone & Webster did. There is nothing in the

- 1 prior stuff that says somebody said to her. I'm upset because
- 2 Stone & Webster put me on.
- 3 JUDGE SMITH: Well, that's the way I read it to be.
- 4 I don't know, you may be arguing that that was the wrong
- inference, but I read it to be a follow-on from the first 5
- 6 paragraph.
- 7 MR. DIGNAN: I read it as an opinion of the state of
- mind formed in her own mind. And further on, she gons on to 8
- say one consequence and so forth will be -- will be --9
- JUDGE SMITH: Now, wait a minute, I didn't come to 10
- 11 that one.
- 12 MR. DIGNAN: Okzy, well, I'm objecting to this
- 13 package as incompetency.
- SUDGE SMITH: All right. 14
- MR. DIGNAN: The next statement is, one consequence 15
- of circumventing will be to further --16
- JUDGE SMITH: All right, that's different. 17
- MR. DIGNAN: But I put them both in the same 18
- 19 category.
- JUDGE SMITH: Well, I want to take one at a time. 20
- MR. OLESKEY: There's two different thoughts there, 21
- Judge. 22
- JUDGE SMITH: Yes, I know. I want to take one at a 23
- time, and I would like to, just for convenience so we don't 24
- have several rounds. I would like to ask Ms. Hollingworth what 25

- is the basis of that statement. I believe Stone & Webster's 1
- 2 designation of potential shelters, how did you form that
- 3 belief?
- THE WITNESS: (Hollingworth) Because of what people 4
- said to me on the phone when they called that they had just 5
- found out that their name was on a list, and they couldn't 6
- 7 believe that someone would put their name on a list as a
- potential shelter without contacting them first. That was the 8
- 9 anger that they were feeling with the idea that someone would
- 10 take their private homes, in some cases, and their businesses,
- in other cases, and put them on a list without anyone coming to 11
- their door and knocking and telling them they were doing so. 12
- JUDGE SMITH: All right. They may or may not have 13
- known that Stone & Webster did it, but whoever did it was 14
- 15 formed, in your view, some --
- 16 THE WITNESS: (Hollingworth) Very angry people.
- 17 JUDGE SMITH: Okay.
- THE WITNESS: (Hollingworth) In fact, I think the 18
- 19 angriest I've over seen my community.
- JUDGE SMITH: Okay. 20
- (Board confers.) 21
- JUDGE SMITH: Our ruling is that the first sentence 22
- of the following paragraph remains. She has -- she has a 23
- satisfactory basis for forming that opinion. 24
- However, the balance of the paragraph is not 25

- acceptable starting with, "One consequence of circumventing 1
- 2 discussions, or failing to obtain consent of property owners
- will further discredit the reliability or believability," " at 3
- is purely opinion evidence as to which she has no special 4
- 5 qualifications. It may be a personal belief, but not
- sufficient to express an opinion in this hearing. 6
- 7 She has established no basis to speak for most of the
- residents of the seacoast, and she certainly has not 8
- established any expertise for the sentence that most of the 9
- buildings that had been listed do not even approach their 10
- expectation of an appropriate shelter. 11
- We are unaware of any expertise that she has to make 12
- 13 that statement.
- MR. BROCK: Your Honor, could I just --14
- JUDGE SMITH: Consequently, the conclusion fails. 15
- MR. BROCK: Your Honor, I would just point out --16
- JUDGE SMITH: That's the last sentence of that 17
- 18 paragraph.
- 19 MR. BROCK: Understand that.
- Later in the testimony Representative Hollingworth 20
- discusses the reasons why the owners have conveyed to her that 21
- they will not allow the public to use these sheiters, because 22
- they don't think that they are adequate or appropriate. And I 23
- think that that is the conclusion stated. Most of the residents 24
- 25 have an idea of what a radiation shelter

- should be. I mean if the Board wishes to inquire of 1
- 2 Representative Hollingworth, it's certainly my understanding
- 3 that she formed that opinion based upon her discussions with
- 4 her constituents.
- 5 MR. DIGNAN: With 100 constituents.
- MR. BROCK: One hundred out of 101. 6
- MR. DIGNAN: There's only 101 people in her district? 7
- MR. BROCK: That she talked to. 8
- 9 MR. DIGNAN: Could Representative Hollingworth be
- inquired of. Your Honor, as to how many people are in her 10
- 11 district?
- JUDGE SMITH: I know it's more than a hundred. Now, 12
- I mean -- we don't want to go to that. 13
- Mr. Brock, we see no basis to change our ruling. She 14
- has no -- I don't know where she finds the basis for --15
- 16 MR. BROCK: Well, Your Honor, I --
- JUDGE SMITH: -- knowing residents of the seacoast 17
- have an idea what a radiation shelter should be, and most of 18
- the buildings that had been listed do not even approach their 19
- expectation of an appropriate shelter, their expectation of an 20
- appropriate shelter. It's two steps remote. 21
- Number one, what is an appropriate shelter has been 22
- the subject of a lot of expert testimony and cross-examination 23
- as we recognize today. So here not only do we have a judgment 24
- as to what an appropriate shelter is, but on top of that, most 25

- of the seacoast expressing their views of what an appropriate 1
- 2 shelter is, and it just simply is not reliable in the sense
- 3 that we have been using appropriate shelter.
- MR. BROCK: I understand, but they are not speaking 4
- here as experts, Your Honor. They are simply expressing their 5
- opinion and belief. And based upon that opinion and belief, 6
- 7 they are not going to let the public in because they don't
- think it's going to work. 8
- 9 And whether that's appropriate technically is a
- different issues, but they believe it to be true. 10
- JUDGE SMITH: It's not cast that way. If it were 11
- cast that way, you might have a different argument. 12
- MR. BROCK: Your Honor, if I could just refer the 13
- Board to Page 4, Part 5, Subpart A, "The owners believe that 14
- their typically unwinterized wood frame structures would not 15
- provide meaningful protection for themselves for themselves or 16
- 17 the public from radiation."
- JUDGE SMITH: That we would approach differently, but 18
- 19 that's not the sentence that we're striking.
- "Most of the residents have an idea of what a 20
- radiation shelter should be, and most of the buildings that 21
- have been listed do not even approach their expectation of an 22
- appropriate shelter." 23
- See, she has started with a predicate that they know 24
- what a shelter should be, and it doesn't meet their 25

- 1 expectations.
- 2 Now you want to go back here farther on as to right
- 3 or wrong their expectations are not being met as a separate
- matter, we haven't addressed that yet, have we? 4
- MS. WEISS: All you would have to do, I think, is 5
- 6 strike the first part of that sentence to meet your objection.
- 7 The part of the sentence that says, "Most of the residents have
- an idea of what a shelter should be". If that was struck, I 8
- think the remainder would fit within what's permissible. 9
- JUDGE SMITH: Well, this says understand, correctly 10
- or incorrectly, they have an idea of what a shelter should be, 11
- that's the sense in which it is --12
- 13 MR. BROCK: That's correct, Your Honor.
- JUDGE SMITH: -- and that doesn't meet their 14
- 15 expectations.
- MR. BROCK: And I think that's the way it's intended. 16
- 17 (Board confers.)
- MR. BROCK: Your Honor, we're certainly willing to 18
- stipulate that Representative Hollingworth does not have the 19
- technical expertise to evaluate on that basis what an adequate 20
- shelter is. I think the substance of the testimony though 21
- conveys the information, opinions, beliefs of her constituents. 22
- And in that light, we'd ask that it be admitted. 23
- JUDGE SMITH: We've moved on in our deliberations to 24
- a slightly different point, and that is, given that what she is 25

- saying here that most of the residents have an idea, correct or 1
- incorrect, but a concept of what a radiation shelter should be, 2
- 3 and it doesn't meet their expectations.
- Now we're wondering if her communications have 4
- imparted to her an accurate picture of what their idea is, and 5
- we don't see that either. I don't know if it's in here or not, 6
- 7 but we don't see that.
- MR. BROCK: Well, as I understand, the Board has 8
- 9 stated that it is typical for constituents to call, express
- their views to the representative who in turn expresses it to 10
- appropriate bodies, which is what is being done here, Your 11
- 12 Honor.
- JUDGE SMITH: Well, I didn't go that far. 13
- MR. BROCK: Well, I would so submit that that's 14
- 15 appropriate procedure.
- JUDGE SMITH: Well, you don't have to go that far, 16
- and we're not going that far. It's the collection of the 17
- information which we believe meets the test of regularity, not 18
- the imparting of it. That's different. You don't have to get 19
- 20 involved in that.
- (Board confers.) 21
- JUDGE SMITH: Where we are now is we have not ruled 22
- on -- we ruled earlier that the sentence beginning "Most of the 23
- residents" should not be admitted based upon our reading that 24
- most of the residents were thought to have an accurate idea, an 25

- expert idea of what radiation shelters should be, and we 1
- 2 rejected it.
- 3 Now we're at the point where we recognize that you're
- saying that what we have here is that the residents have an 4
- 5 idea, right or wrong, an idea and their expectations are being
- 6 met.
- 7 We hold that in abeyance because we don't have any
- 8 support for it.
- MS. WEISS: Mr. Chairman, may I just suggest 9
- generally, rather than pick this testimony apart sentence by 10
- 11 sentence and word by word, that we allow the witness to
- testify. She can be cross-examined subject to motion to 12
- strike, and we could be here for the next day and a half 13
- picking this thing apart sentence by sentence, and it just is 14
- completely unwarranted given the conclusions that she reaches, 15
- some of which are common sense and obvious on the face of it. 16
- MR. DIGNAN: Your Honor, should I continue with my 17
- 18 objection?
- JUDGE SMITH: No. the Board cannot arrive at a 19
- 20 consensus.
- MR. DIGNAN: Would Your Honor appreciate my laying 21
- out my other objections? Perhaps this is a matter the Board 22
- would like to give consideration to overnight and rule 23
- tomorrow, and I can at least lay out the rest of the objections 24
- 25 I have for the testimony and the reasons therefor.

	MOUGHAN, HOLLINGWORTH, LINCOLN - DIRECT 10806
1	JUDGE SMITH: Well, the trouble is it's late in the
2	day. You get a pile of objections. It's easier for me to rule
3	unless they're all related and they all
4	MR. DIGNAN: They are all related, Your Honor.
5	JUDGE SMITH: Go ahead
6	MR. DIGNAN: The other thing is I'll happily probably
7	concede to Your Honor that I understand you will probably
8	overrule some of these that are coming given your prior ruling.
9	I would just like to make them for the record
10	JUNGE SMITH: All right.
1	MR. DIGNAN: to preserve my record.
2	JUDGE SMITH: Go ahead.
.3	MR. DIGNAN: I would then object also on Page 4, the
4	paragraph that begins paragraph 5, al) the way down to the
15	beginning of paragraph six. In other words, all of the
16	paragraph that's numbered 5. It's a hearsay objection.
7	And then in addition, I would object to the admission
8	in paragraph eight of the single sentence, the third sentence.
9	JUDGE SMITH: Wait a minute. Would you go back
20	beginning with item five on Page 4? Where does that end, the
1	objection end?
2	MR. DIGNAN: It's a hearsay objection, Your Honor.
23	JUDGE SMITH: Yes. Where does it
4	MR. DIGNAN: It ends with paragraph 5. It's

JUDGE SMITH: All of paragraph 5.

- MR. DIGNAN: -- paragraph 5, sub (a) through 1
- 2 sub (e); yes. Your Honor.
- 3 I apologize.
- MR. BROCK: And, Your Honor, for the record, since I 4
- 5 haven't heard anything more specific as to paragraph 5 and the
- 6 problems other than a general hearsay objection, I would simply
- 7 reiterate the arguments that were made previously. If Mr.
- 8 Dignan at point offers more specific --
- 9 DIGNAN: Well, I haven't finished my objection,
- Mr. Brock. That's why you haven't heard anything. 10
- MR. BROCK: May I respond, Mr. Dignan, just to this 11
- 12 point?
- 13 MR. DIGNAN: I thought I --
- MR. BROCK: I would just reiterate that point for the 14
- 15 record.
- MR. DIGNAN: On 5, the only reason I can urge upon 16
- you, other than the straight hearsay objection, is to review in 17
- terms of this, if allowed in it provides a basis for findings 18
- as to certain unexplained in number, unexplained in type on 19
- more than 50, I guess, less than 75, I don't know, that 20
- proposed structures have certain deficiencies. 21
- I've got no way to cross-examine that. I'm put right 22
- back against the wall. And yet in the record will be testimony 23
- above the Stone & Webster study, many of the structures have a 24
- significant amount of exterior glass walls and windows. And 25

1	w. t can I do with that?
2	MR. BROCK: Your Honor, he can cross-examine is what
3	he can do.
4	MR. DIGNAN: No, I know what she's going to say.
5	She's going to say
6	MR. BROCK: He can offer rebuttal testimony.
7	MR. DIGNAN: She is going to say, I was told that,
8	when I cross-examine here, and I don't doubt that the woman wa

told that, but I don't have any crack at whether what she was 

being told was the truth on those matters. 

MR. BROCK: She also lives on the beach, as the testimony says, and has for 57 years, Mr. Dignan. She probably 

has some personal opinion as well. 

(Laughter.)

(Continued on next page.)

E74

- MR. DIGNAN: Ms. Hollingworth, I'm ready to call him
- a liar, I don't believe you're 2
- (Laughter)
- MR. BROCK: I am sorry about that.
- MR. DIGNAN: Your Honor, that's my problem here, in 5
- which I have no doubts that she will testify she was told this, 6
- and that she will be testifying truthfully under cross when she 7
- 8 says she was told this.
- What I don't know is whether she was told the truth 9
- over the phone. This is the trouble with double hearsay. And 10
- the problem with it in this setting is it provides, if you let 11
- 12 it in, the basis for proposed finding that says, many of the
- proposed structures have a significant amount of exterior glass 13
- walls and windows. 14
- And I don't know what structures -- and it's that --15
- that's the reason for the hearsay objection. 16
- JUDGE SMITH: We are sensitive to the difference in 17
- the specificity of the paragraph of five as compared to the 18
- 19 general -- the general community feeling that she's
- 20 communicated in the first paragraphs.
- MR. DIGNAN: Well, you've heard me on that --21
- 22 JUDGE SMITH: Into account, that's what you want us
- 23 to do, right.
- MR. DIGNAN: Right. Now, paragraph eight, Your 24
- Honor, I object --25

Heritage Reporting Corporation (202) 628-4888

other owners."

25

- MR. DIGNAN: Yes. I'm assuming the first two 1
- statements are --2
- JUDGE SMITH: Ok v. got it. 3
- MR. DIGNAN: -- statements based on the witness' 4
- 5 personal knowledge.
- JUDGE SMITH: Got it. 6
- 7 MR. DIGNAN: That's the way they're cited.
- 8 And I also am assuming the last sentence because it
- doesn't reference a source is of the witness' personal 9
- knowledge. We can test that on cross-examination. 10
- 11 Now, on paragraph nine --
- JUDGE SMITH: Well, wait a minute, the last one --12
- MR. DIGNAN: It says, "Certain other basements are 13
- 14 also utilized as apartments or owner residence," which would
- be -- in other words, she doesn't say somebody else is telling 15
- her that, that's her I assume. 16
- JUDGE SMITH: Right. So you don't object to that? 17
- MR. DIGNAN: I don't object to that sentence. That's 18
- her personal knowledge and presumably she can carry it. 19
- JUDGE SMITH: Got it. 20
- MR. DIGNAN: Now, paragraph nine, again, the first 21
- sentence I assume is a statement of her personal knowledge. 22
- The second one, however, is hearsay. And again, 23
- these are owners saying, "They would similarly lock their 24
- doors." Supposedly these are owners who are being told they 25

- 1 formed an opinion, if you will, that a nuclear emergency with
- 2 people seeking supplication for that are the same as rioters
- 3 and to be treated alike. Now, I don't know whether they mean
- 4 that or not, and I sure as heck can't cross-examine them, but
- 5 it's going to be in the proposed findings that a number of
- 6 owners down there will lock their doors because they're going
- 7 to treat it as though it was a riot. And I don't think --
- 8 MR. BROCK: Your Honor, it's my understanding --
- 9 MR. DIGNAN: Mr. Brock, if I could finish, please,
- 10 sir. I do not think that it is appropriate use of hearsay to
- 11 set up a finding that says people, unnamed, uncross-examined
- 12 are equating a riot to the situation where there's a nuclear
- 13 emergency and people are seeking succor for that reason.
- I can see a lot of distinctions in my mind between
- 15 the person who would lock their doors if a riot is going on
- 16 outside and you don't know if the person coming through is a
- 17 rioter, gun in hand or whatever. And a situation in what
- 18 you're doing is being asked to take people in who are in danger
- 19 and fear of the' lives from an exterior source; I think
- 20 there's a big distinction.
- 21 And finally, I would object to the general conclusion
- 22 on page 10, both since it is based basically on all that went
- 23 before it, and to that extent it is undermined by being based
- 24 on hearsay; and to the extent it's based on the material I
- 25 objected to that she is not competent to testify to.

- MR. BROCK: Your Honor, Mr. Dignan seems to offer as 1
- a basis for exclusion of testimony that he will have difficulty 2
- in the cross-examination. I'm not aware that that's a basis 3
- 4 for exclusion.
- The issue is whether the information in the testimony 5
- is reliable. We've already testified as to why Representative 6
- Hollingworth is here and how, at least, the information in 7
- large part was conveyed to her either through her constituents 8
- 9 or by personal knowleds .
- 10 Now, Mr. Dignan can cross that. He has opportunity
- 11 for rebuttal. He has had people which supposedly have
- investigated every one of these shelters. And he can offer 12
- 13 rebuttal testimony if he feels these conclusions are
- inappropriate. We don't think that --14
- 15 JUDGE SMITH: Well, obviously, one of the historical
- reason for the hearsay rule is, he can't cross-examine the 16
- declarant as to the truth of the matter in the statement. And 17
- the fact that you can rebut is not a total remedy. I don't 18
- 19 think that's going to take you too far.
- But we will look at the particular statements and see 20
- how they fit in to the degree of particularity. How precise 21
- they are. How difficult it would be to confront the 22
- information as to this witness and make a ruling. We'll do it 23
- 24 right now if you want. I'm going to take a break or do you
- 25 want to continue?

- 1 MS. WEISS: May I be heard?
- MR. TURK: I would as well, Your Honor. We would 2
- 3 like to be heard. I'll let Ms. Weiss go first.
- 4 MS. WEISS: You know, I just want to say that I don't
- see that there's any difference in kind between Mr. Dignan's 5
- difficulty with cross or lack of difficulty with cross-6
- 7 examining Representative Hollingworth, and the difficulty that
- 8 was posed by the Stone & Webster panel.
- 9 It is always posed by presenting these panels who
- testify to what people who work for them do, and people, you 10
- 11 know, we sat through testimony that a survey was done by many
- 12 people and some of it was assembled by the witness and some of
- it was assembled by other people. Another person went and 13
- lopped off 10 or 20 buildings and the witness didn't know what 14
- the criteria were, didn't know which buildings were taken off, 15
- or particularly why they were taken off. 16
- I mean, that's just a function, the fact that we're 17
- in an administrative proceeding and we do have loosened hearsay 18
- rules. There's nothing different in kind between that problem 19
- and the problem posed by this testimony. 20
- In fact, I would suggest that this is a substantially 21
- less problem posed with this testimony. 22
- JUDGE SMITH: Well, isn't there a difference between 23
- one member of a team coming and testifying as to what the team 24
- did compared to the testimony that's being offered here? 25

1	MS. WEISS: No, I don't really
2	JUDGE SMITH: You don't see that?
3	MS. WEISS: Not when the witness was saying that
4	people made choices. Many of these witnesses testified about
5	what other people did that weren't even under their direct
6	supervision, and as to which they couldn't even say exactly
7	what was done or
8	JUDGE SMITH: That may very well have been grounds
9	for objection, I don't know. But traditionally in NRC
10	proceedings, and I think this is probably done in NRC
11	proceedings more than other agencies, and that is, one or more
12	representative of a group of people who have done work will
13	come to defend it. And hearsay objections can be made and
14	should be made when the circumstances surrounding that do not
15	support reliability.
16	MS. WEISS: Well, we all have an opportunity to do
17	rebuttal and to go out there, you know, this is
18	JUDGE SMITH: Should we, for example, conclude from
19	Representative Hollingworth's testimony that many owners will
20	lock out the public? I just can't I mean, that is just
21	inherently unreliable.
22	MS. WEISS: No, I think what you can conclude is that
23	many people have told her that they will lock out the public,
2.4	and that's essentially what this says. And certainly that

25

JUDGE SMITH: So are you arguing that should be the

- 1 limitation?
- MS. WEISS: I think that's what the testimony says.
- 3 JUDGE SMITH: But I mean, are you arguing that that
- 4 should be the limitation, the use of the testimony?
- 5 MS. WEISS: I'm not arguing that, I think that's what
- 6 Mr. Dignan's arguing.
- JUDGE SMITH: Well, you're arguing in a very, very
- 8 precise way.
- 9 MS. WEISS: That's how he's going to handle it.
- MR. DIGNAN: Keep going, you're doing great.
- 11 (Laughter)
- MS. WEISS: He's going to come back in his findings
- 13 and he's going to say, this is how this should be limited, it
- 14 should be limited because, you know, Mrs. Hollingworth was
- 15 offering what other people said to her. And you will weigh it
- 16 like you weigh all the evidence before you.
- 17 But to pick this apart word by word by word is such a
- 18 double standard. That's what I really object to.
- JUDGE SMITH: Wall, I appreciate your pointing that
- 20 out.
- MR. TURK: Your Honor, if I may be heard, also.
- JUDGE SMITH: Mr. Turk.
- MR. TURK: I didn't bring my procedure digest, in the
- 24 past I've brought so many things with me and I've always been
- 25 the last to leave the room, so this time I tried to cut down my

- 1 burden of documents, so I'm without sources to quote.
- 2 But I believe it was the Waterford case in which it
- 3 said that, the testimony of an expert based upon what unnamed
- 4 other experts have told them is hearsay and is inadmissible.
- 5 MS. WEISS: It's not another expert.
- 6 MR. TURK: It doesn't matter that it's an expert or
- not an expert. It's a declarant out of the presence of the 7
- courtroom unnamed, unidentified. It's beyond the scope of, 8
- what I think the Board has indicated, may have the earmarks of 9
- 10 reliability.
- Now, I want to note a point of more general reference 11
- and that is, Massachusetts has experts who are going to come 12
- before you, who are going to discuss a survey which they 've 13
- conducted which does have lots of earmarks of reliability and 14
- credibility. I don't know that -- if there's a portion of 15
- Representative Hollingworth's testimony that's excluded on 16
- this, but the Intervenors' case is in any way diminished, 17
- because in fact they have experts who have done a survey who 18
- can testify to pretty much the same things that Representative 19
- Hollingworth would like to have you accept based upon the 20
- statements of unnamed persons out of your presence. 21
- MS. WEISS: Well, why should we decide this case on 22
- the basis of what two experts say and not what the basis of the 23
- real people say. 24
- MR. TURK: It's not a question of expertise, it's a 25

- 1 question of reliability of the evidence.
- MR. BROCK: And I think that with the experts that 2
- 3 the AG is offering that will only enhance the reliability which
- 4 I think her testimony could stand alone, it will be enhanced
- and reliability with the experts to be offered by the 5
- 6 Commonwealth.
- We'll take it under advisement. 7 JUDGE SMITH:
- MR. OLESKEY: May I just make one last point, Judge?
- Mr. Oleskey. JUDGE SMITH: 9
- Thank you. 10 MR. OLESKEY:
- These people who communicate to their representative 11
- their views as expressed are hardly unidentified, as Mr. Turk 12
- has said. They are known to Representative Hollingworth, and I 13
- dare say, if you ask her to come in the morning and tell you 14
- the names of the people who contacted her, she could do it. 15
- 16 So they are known. They're hardly unidentified
- informants. More fundamentally, they're the owners of the 17
- buildings. They're a better source than a compilation team of 18
- experts, arguably, what ours -- or the Applicants who roam the 19
- 20 streets taking notes.
- JUDGE SMITH: You know, I want you to know that, 21
- maybe you really ought to quit while you're ahead. We are 22
- allowing Representative Hollingworth, in the context of her job 23
- as a state representative, who routinely and regularly receives 24
- calls from constituents and she, from that source of 25

- 1 information, can form a feeling or a consensus of what her
- constituents feels. That's all part of the process, the 2
- 3 government process.
- I recall the case of The United States versus Mandel 4
- where the conviction of Governor Mandel was overturned when the 5
- members of the state legislature came to court and testified, 6
- hey, we developed a consensus, a feeling based upon what was
- going on there that this bill was railroaded; and the whole 8
- conviction was torn out. We have extended it very, very far to 9
- allow, knowing that Representative Hollingworth is an active 10
- antinuclear opponent -- I mean, a person here to bring in the 11
- consensus of her constituents, is a far reach of a hearsay 12
- 13 rule.
- Now, when we get down to the particulars of her 14
- testimony we're going to have to look at it and see just how 15
- that fits into the whole scheme. 16
- MR. BACKUS: Judge Smith --17
- JUDGE SMITH: Anything further? 18
- MR. BACKUS: -- I have one suggestion that comes up 19
- out of this and it goes back to something at the very 20
- beginning. Some of the dispute was about what's there? How 21
- many windows on these buildings? 22
- I again would renew my request that the Board 23
- consider taking a view, because what's there is there and we 24
- can look at it. We don't need to depend on qualitative 25

- judgment as to the windows, you can see them. 1
- So, insofar as this goes to hearsay about the 2
- 3 character of the building stock there, the way I suggest to
- solve that is to arrange of a view and we'll all go down there 4
- 5 and take a look.
- And I might add that, amazing enough we're coming up 6
- on another prime beach season very soon, so we can pick a nice 7
- 8 beach day.
- JUDGE SMITH: All right. We'll take the objections 9
- under consideration. 10
- MR. TURK: Your Honor, do we have a schedule in mind 11
- for tomorrow? I assume we're leaving at the noon hour or 1 12
- o'clock, in that time frame? 13
- JUDGE SMITH: That's what we had previously done, and 14
- if it really catches people unprepared, we'll discuss it. We 15
- had hoped to go farther in the afternoon this time. And we 16
- 17 want to discuss perhaps another approach to the schedule
- tomorrow for the following week. But unless there is strong 18
- objections from the parties, based upon a change, we'd like to 19
- go later in the afternoon. 20
- MR. DIGNAN: Your Honor, for planning purposes, at 21
- least from the Applicant's point of view --22
- JUDGE SMITH: Can we go off the record on this. 23
- We're adjourned. 24
- 25 Off the record. et/75

1	(Whereupon, at 5:11 p.m. the hearing was adjourned	to
2	reconvene tomorrow morning at 9:00 a.m., Friday, May 6, 1988,	
3	at the same place.)	
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		

25