

DOCKETED
USNRC

August 31, 1988
'88 SEP -6 P4:46

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

before the
ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
)	
PUBLIC SERVICE COMPANY OF)	Docket Nos. 50-443-OL
NEW HAMPSHIRE, et al.)	50-444-OL
)	
(Seabrook Station, Units 1 and 2))	(Off-site Emergency
)	Planning Issues)
)	

APPLICANTS' REPLY TO PROPOSED FINDINGS OF FACT
AND CONCLUSIONS OF LAW OF OTHER PARTIES ON
SHELTER CONTENTIONS

Applicants' reply to the proposed findings of fact and conclusions of law of the Attorney General for the Commonwealth of Massachusetts ("Mass AG"), New England Coalition on Nuclear Pollution ("NECNP"), and Seacoast Anti-Pollution League ("SAPL") (hereinafter collectively "intervenors") is in two parts: the first responds to intervenors' general citation to and reliance upon the testimony and previous position of Edward A. Thomas, and the second section responds to particular intervenors' proposed findings which do not state the evidence correctly.

8809120014 880831
PDR ADOCK 05000443
C PDR

I. Intervenors' Unwarranted Use of Thomas Position and Testimony.

In their proposed findings, intervenors cite and rely on the testimony and previous position of Mr. Edward A. Thomas, formerly the Chairman of the Regional Assistance Committee ("RAC") of the Federal Emergency Management Agency ("FEMA"), Region I.¹ Intervenors' general purpose citations to and reliance on the previous Thomas position are without warrant because no witness adopted that position or attempted to defend it on cross-examination. Intervenors' reliance on Thomas's actual testimony is also misplaced. Thomas's testimony was not credible for the reasons set out below and those proposed findings which would rely on his veracity should be rejected.

A. Intervenors' Unwarranted Citation to Previous Thomas Position

In June 1987 FEMA filed a statement of its position on shelter contentions and three months later refiled the statement as prefiled testimony naming Thomas as the only witness to defend it. (That two-page statement is hereinafter referred to as the "Thomas position"). The Thomas position was never adopted by anyone under oath, and

¹ See, e.g., ["NECNP's] Proposed Findings of Fact and Rulings of Law" dated August 12, 1988, at 53-56; "[Mass AG's] Proposed Findings of Fact and Rulings of Law on Sheltering Contentions" dated August 15, 1988, at 1; "[SAPL's] Proposed Findings of Fact, Rulings of Law and Conclusions of Fact on Issues Related to Sheltering and Protection of the Beach Population" dated August 10, 1988, at 1. Despite the reference on page one of Mass AG's filing, Town of Hampton did not file proposed findings of fact.

no one ever attempted to defend it on cross-examination. It was appended to Mass AG Ex. 35 which was admitted only "for the limited purpose of demonstrating the basis or the reasons for FEMA's evolution of its position," Tr. 12862, and not for the truth of any of its statements or for any purpose independent of its place in the evolution of FEMA's position. Moreover, Thomas does not purport to have a technical background or technical expertise and so would not have been competent to sponsor the testimony even if it had been offered. Staff Ex. 3, Post Tr. 11747 at 1; Tr. 11951-52, 12136-37. Moreover, Thomas himself partially recanted his position. Tr. 12769-70, 12774-75, 13098, 13832.² FEMA eventually rejected the Thomas position and submitted other testimony by other witnesses as the FEMA position on the shelter contentions. FEMA Dir., Post Tr. 13968. Intervenors repeatedly and without any warrant cite to the Thomas position as if it had some independent evidentiary status.³ It does not.

B. Intervenors' Unwarranted Reliance on Thomas Testimony

Intervenors have proposed findings which would rely on Thomas's credibility. This section does not address those proposed findings in particular, but sets forth examples of

² At Tr. 13841, Thomas recanted part of his recant.

³ See, e.g., SAPL Proposed Conclusions of Fact n.3 10.3.1, 10.3.14, NECNP Proposed Findings of Fact 29, 56-61, 71, 79, 147, 148, 149, 154.

his lack of credibility which show that his testimony on all points is not to be credited.

As to Concurrence of the RAC. When he first appeared as a witness under oath in these proceedings, Thomas presented testimony as to the "collegial process" of the RAC in the development of FEMA's position on contentions, including shelter contentions. Tr. 3102-06, 5096-99. Thomas's "collegial process" testimony, written in advance and offered into evidence as true, presented the FEMA position as though it had been concurred in and supported by the RAC. Tr. 3088; Post Tr. 3088 at 4. But it was not. Thomas's testimony on this matter was flatly contradicted by the testimony of other witnesses. The RAC did not agree with the Thomas position. Tr. 11901, 12038-39, 12042. Thomas admitted to the RAC that he was ignorant of any of the technical aspects of nuclear power operation, and that in this regard he depended upon the technical expertise of the RAC members, Staff Ex. 3, Post Tr. 11747 at 1; 11951-52 but he ignored their expertise on the beach shelter issue; see also Tr. 3141-42 ("Q. All right, and you had the full, as you said, the full benefit of the views of the members present at that meeting, prior to the filing of the testimony, including the view of the NRC? A. (Thomas) Yes, Sir.") Nevertheless, his testimony gave the appearance that he had the concurrence and backing of the RAC for his position. See, e.g., Tr. 3124-26, 3140-42, 3147-48, 3102, 3104, 5101, 5103, 5113.

Thomas also maintained he had RAC support for his shelter position when he wrote his letter of explanation to the State of New Hampshire. In his explanatory letter to Richard H. Strome, Director of the New Hampshire Office of Emergency Management, Applicants' Ex. 39, at 2-3, Thomas wrote:

"The current FEMA position is largely based upon the FEMA and Regional Assistance Committee (RAC) reviews which were previously provided to you. The portion of the current FEMA position dealing with the beach population is based on a thorough analysis by FEMA and the RAC."

Thomas's statements to the State of New Hampshire and his testimony before this Board failed to disclose the lack of RAC backing for his position and the fact that the RAC would not support his views. See Tr. 11909-11. Indeed, as Thomas finally admitted on June 14, 1988, before the filing of his position in September 1987, and before he testified under oath before this Board, he had known "the RAC is not with us on this one." Tr. 13607-08.

As to the Significance of the Seabrook Containment. The RAC's position on the beach shelter issue was favorable to the Applicants and the State of New Hampshire except for readily solvable concerns.⁴ Tr. 3116-17, 3162. Thomas testified that the RAC's positive position relied "very, very heavily", Tr. 3114, on certain information provided by the

⁴ The phrase "beach shelter issue" encompasses the matters raised in the shelter contentions NECNP RERP-8, SAPL 16, and TOH VIII. The "readily solvable concerns" were minor points not addressed in this litigation.

NRC about Seabrook containment features. Tr. 3115, 3159-60. But in fact the RAC did not rely on that information. Tr. 11850-51, 11882. Thomas himself could not have relied on information about the Seabrook containment, as he was not conversant with these technical issues. Staff Ex. 3, Post Tr. 11747 at 1; Tr. 11951-52, 12136-37. Furthermore, Dr. Robert J. Bores, RAC member representing the NRC and author of the memorandum providing information about the Seabrook containment, explained to Thomas that such information had no bearing on the RAC shelter position and also explained why it could not have any bearing. Tr. 11926-27, 11888. Indeed, that "removing any probability discussions (or assuming the probability of a serious accident was 1), the plans still met the regulations, NUREG-0654 criteria, and provided reasonable assurance." Staff Ex. 2, Post Tr. 11744 at 5. Mr. William Lazarus, Emergency Planning Chief, Nuclear Regulatory Commission Region I, also explained to Thomas that containment features bear on the probability of accidents and not on the adequacy of the State of New Hampshire's plans for responding to an accident. Staff Ex. 3, Post Tr. 11747 at 1.

As to Events at the July 31, 1987 RAC Meeting. Thomas testified that he could not remember anyone calling for a vote of the RAC on the beach shelter issue at the July 31, 1987 RAC meeting, that he did not recall an NRC representative requesting that a vote be taken. Tr. 5106-07. Thomas recalled no vote, Tr. 3123, 5106-07, 5111, 5113,

formal or informal, on the beach shelter issue; he recalled no show of hands. Tr. 5106. Thomas did recall the RAC concurring that it needed more information. Tr. 3123, 5106, 5113.

In fact, Lazarus specifically requested Thomas to take a poll of the RAC on the beach shelter issue; Thomas refused. Tr. 11953; Staff Ex. 2, Post Tr. 11744 at 5; Staff Ex. 3, Post Tr. 11747 at 1. At that refusal, Lazarus himself polled the RAC and the RAC informally voted by a show of hands. Tr. 11953-56; Staff Ex. 3, Post Tr. 11747 at 1-2. The hands showed that all RAC members except FEMA agreed with the NRC on the beach shelter issue. Tr. 11956; Staff Ex. 2, Post Tr. 11744 at 5; Staff Ex. 3, Post Tr. 11747 at 1-2. Only Thomas suggested the need for more information, Tr. 11989; the RAC members did not concur. Tr. 12039-40.

As to Input of the RAC on Thomas's Position. Thomas testified to the effect that the RAC did not discuss the specific wording of the Thomas position before June 4, 1987, Tr. 5101, 3111, but that the issue had been extensively discussed, and that he had the benefit of discussions with individual RAC members before his position was first filed, Tr. 3115, 3141-42. In fact, the issue had been extensively discussed, but the RAC's position favored Applicants, Tr. 11853, 11900-01, 11904. After the publication of the Thomas position on June 4, 1987, Thomas once again had the benefit of knowing that the RAC disagreed with his position, but

again he disregarded it. Tr. 12221-22, 12511-13, 11961-63; Staff Ex. 2, Post Tr. 11744 at 5; Staff Ex. 3, Post Tr. 11747 at 2.

As to Reasonable Assurance. Thomas testified that the difference between the RAC's position and the Thomas position was the NRC's withdrawing of the containment features information. Tr. 3170, 3159-60. In fact, the difference between the RAC's view and Thomas's did not have to do with any withdrawn information at all, but with Thomas's version of the meaning of "reasonable assurance." Staff Ex. 2, Post Tr. 11744 at 5; Tr. 11959. Thomas disagreed with the NRC on the meaning of "reasonable assurance". Id.

As to Seabrook as a "Special Case". In the context of beach population issues, Tr. 13375 et seq., Thomas testified that a specific section of FEMA PEP-3 described Seabrook as a "special case" and that he had been and remained greatly influenced by that supposed description. Tr. 13384-85, 13392. In fact however, the section cited by Thomas had nothing whatsoever to do with shelter or beach population issues. Mass AG Ex. 48 at 10.⁵ Instead, it described Seabrook as a "special case" only because of the efforts made to incorporate the input of state and local officials in

⁵ Mass AG Ex. 48, admitted at Tr. 14256 for the limited purpose "to show that it was used by Mr. Thomas and used by FEMA . . . how it was used and how it was understood and how it was employed," Tr. 13388, and "that [it] was a base point of departure . . . by which the agency could make reference to some concerns that it highlighted as early as 1981," Tr. 13389.

FEMA's independent ETE assessment. Id. Thus Thomas mischaracterized FEMA REP-3 even as he testified from it.

II. Particular Intervenor Proposed Findings Which Do Not State the Evidence Correctly.

Applicants address herein only the more significant errors in the proposed findings of intervenors which do not state the record evidence in this proceeding correctly.

A. NECNP Proposed Findings

34. Neither Applicants' witnesses nor FEMA witnesses use "significant dose reduction" as a standard for protective action decisionmaking. The standard utilized and upon which the NHRERP is premised, App. Dir. No. 6, Post Tr. 10022 at 4, is "maximum dose savings."

35. The NHRERP does not anticipate situations where sheltering would be ordered for the general transient beach population. It anticipates that the beach population would be advised to leave the beach or to evacuate the beach area at early stages of an emergency. Tr. 10059. Specific provisions have been, or will be, made for sheltering for the portion of the beach population without their own means of transportation until transportation assistance can be provided. These latter provisions differ from, and go beyond, the "shelter in place" provisions of the NHRERP. App. Dir. No. 6, Post Tr. 10022 at 20-21.

36. New Hampshire has committed to adopt measures for sheltering the transportation dependent beach population

while they wait for transportation assistance. App. Dir. No. 6, Post Tr. 10222 at 20-12 and Appendix 1, page 10 of 47; and FEMA has found that, to some degree, that has already been done. Tr. 14252.

40. FEMA's testimony is to the contrary. Implementing detail for sheltering for the general transient beach population is not necessary or desirable because it is an extremely limited option. Shelter in place provisions of the NHRERP are adequate. Tr. 14252-254.

56. Applicants' witnesses testified that NUREG-0654 does not require consideration of particular accidents or accident sequences in developing emergency plans. Tr. 10759.

59. The "basic facts and the statement of the relevant parameters" referred to and identified in NECNP 55 and 56 have not been admitted in evidence for the truth of the matters contained.

90. The FEMA prefiled testimony of January 23, 1988 has not been admitted in evidence for the truth of the matters contained.

123. NECNP has proposed a finding that Thomas was subject to intimidation by Applicants' counsel, in that: "[Thomas] was told, through FEMA counsel, that there would be blood on the floor if he didn't change his testimony", citing a letter from Messrs. Brock, Backus, and Olesky, counsel for the several intervenors, of November 12, 1987, and he was told that there had been threats to refer his testimony to

attorneys in Massachusetts. First of all, the letter referred to has absolutely no evidentiary value. Moreover, Thomas denies that he was intimidated by any of these events so as to cause a change in his conclusions. The only effect was to make him "incredibly [sic] cautious" in giving his testimony. Tr. 13643. The proposed finding is devoid of relevancy to the record of these proceedings.

B. SAPL Proposed Findings

10.1.3. Wilkerson's opinions about the Seabrook beach population were disallowed by the Board as to the truth of the matters contained. Tr. 13534.

10.1.8. Peterson clarified the discussion among FEMA officials reference on January 13, 1988 as that of not reaching a conclusion until further discussion and consensus ensued. Tr. 12990.

10.1.19. Applicants' witnesses effectively adopted Attachment 3 of Applicants' Direct Testimony No. 6. Tr. 10687-88. The State of New Hampshire has declined to adopt or incorporate it into the NHRERP. Tr. 10707.

10.1.20. The State of New Hampshire has proposed to amend the NHRERP to include implementing details for sheltering the transportation dependent transient beach population awaiting evacuation transportation. App. Dir. No. 6, Post Tr. 10022, Appendix 1, page 10 of 47. These amendments include specifically designed EBS messages and identification of structures for this segment of the

population. The NHRERP has been amended to include an EBS message advising the transportation dependent transient beach population to shelter and which provides for identification of shelter locations for this segment of the population. App. Ex. 5, Vol. 4, Appendix G.

10.1.61. Thomas actually was testifying to working with Attorney Chan of NRC on the FEMA position that resulted from the April 15, 1987 RAC meeting where it was decided that NUREG-0654 elements J.9 and J.10.m were met relying on the Bores 1 memorandum. Discussions at that meeting included the availability of Dr. Bores to sponsor FEMA testimony. Thomas did not testify that he worked with Attorney Chan on preparing the June 4, 1987 FEMA position on NHRERP contentions. Tr. 13513.

10.1.83. William R. Cumming's testimony was in reference to NHREPP, Revision 2, Volume 6 (August 1986), Tr. 14060. It does not refer to the ETES as set out in App. Dir. No. 7, Post Tr. 5621 and App. Dir. No. 6, Post Tr. 10022. The note referred to in SAPL's finding at 6.1.6 should read "it would take 5 hours and 40 minutes, according to Table 10-9 of Volume 6, to get [the last] car just 3 to 4 blocks off the beach" if that proposed finding is to be regarded as a representation of Volume 6.

10.1.86. The proposed finding omits the third condition contained in App. Dir. No. 6, Post Tr. 10022, Appendix 1 at 8 of 47 entitled Transients Without Transportation.

10.1.91. Dennis S. Mileti also testified that there are no empirical studies to the contrary. Tr. 10138.

10.3.2. This conclusion is refuted by FEMA's and Applicants' testimony. Tr. 14252-253; App. Dir. No. 6, Post Tr. 10022, Appendix 1, page 10 of 47; App. Ex. 5, Volume 4, Appendix G.

C. Mass AG Proposed Findings

10.1.6. Mass AG's recitation of the conditions under which the State of New Hampshire would consider sheltering for beach transients omits the circumstances of shelter for beach transients without transportation when evacuation is the protective action recommendation.

10.1.7. Contrary to Mass AG's assertion, the issue presented by the contentions is whether shelter is an available protective action for the beach population, not when sheltering would achieve the most effective maximum dose reduction or to what extent the circumstances are very limited.

10.1.8. Applicants' witnesses agreed with the State of New Hampshire response to Mass AG Interrogatory No. 9 to the extent that the interrogatory quoted the Manual of Protective Actions Guides, U.S. EPA, p. 129, and to the extent that the same paragraph from which the quote was taken also states "sheltering which can be implemented quickly in this case may afford a greater dose savings than evacuation, if evacuation cannot be completed prior to release." Applicants' witness

Anthony M. Callendrello also testified that "a puff release is a release that is difficult to determine the duration of in advance unless you've got a control venting of the plant . . ." and that "I think I would be biased more towards recommending evacuation if you just don't know how long a release is going to be." Tr. 10374.

10.1.10. Applicants' testimony at Tr. 10212-13 did not refer to "rapidly developing, severe accidents" or to "fast-developing accidents involving a large scale release of radioactivity", but it simply acknowledged what NUREG-0654 says. At Tr. 10224, Applicants' testimony again simply acknowledged what NUREG-0654 says. At Tr. 10399, Callendrello agreed that "fast paced, serious accidents" are within the planning spectrum of NUREG-0654, and that such accidents could be less than "worst case accidents." At Tr. 10402, MacDonald testified that "fast paced, serious accidents" are part of the spectrum for which planning is required. Contrary to Mass AG's suggestion, NUREG-0654 does not require consideration of particular accidents or accident sequences in developing emergency plans. Neither the Applicants nor the State of New Hampshire considered particular accident sequences in developing emergency plans. Tr. 10759-60.

10.1.11. Mass AG's assertion is inaccurate. Applicants' witness James A. MacDonald testified that emergency plans under NUREG-0654 guidelines are to address an

entire spectrum of accidents. Tr. 10402. MacDonald did not agree, for example, that the most serious accidents are fast releases of one or two hours' duration. Tr. 10333.

10.1.14. FEMA's witness Joseph Keller testified at Tr. 14241 that "in the end of the spectrum there are some accidents, which if they occur, could result in early health effects . . . and that primarily comes from the ground shine component." This was in the context of explaining that, because of the uncertainties, it is better to evacuate people within two to three miles "basically automatically." Tr. 14255-256. Keller finished the sentence Mass AG partly quoted with the conclusion "and that's immediate evacuation."

10.1.15. Contrary to Mass AG's assertion, at Tr. 10401 MacDonald did not define "fast paced, serious accidents" as "accidents comparable to PWR-1 through PWR-5 accidents of WASH-1400." Those were Mass AG's representative's words. MacDonald testified that he considers these accidents as worst case accidents which "are a significant portion in terms of potential circumstances, but at the very end of the [planning] spectrum."

10.1.22. Mass AG misquoted Keller's testimony at Tr. 14245-246. Keller actually testified that "in order to have serious health -- early health effects that the release had to start . . . fairly quickly."

10.1.23. The testimony represented by Mass AG as uncontradicted was in fact contradicted by Applicants' and

FEMA testimony. Applicants' testimony placed PWR-1 through 5 accident sequences at the very end of the planning spectrum.

10.1.25-26. Applicants' witnesses and FEMA's witness testified that the two factors - time to release and duration of release - are very uncertain and unlikely to be known prior to the event. See, e.g., FEMA Dir., Post Tr. 13968 at 9. Applicants' witness Callendrello, during the same line of questioning, cautioned that the conditions postulated by Mass AG's representative are difficult to determine unless they result from controlled venting. Tr. 10375.

10.1.29. Mass AG inaccurately characterizes Keller's testimony at Tr. 14197-97. Keller agreed, in general, with the postulate of NECNP counsel that "evacuation must begin before or shortly after a release for it to reduce the risk to the public substantially." (emphasis added) Subsequently, Keller qualified his agreement with the postulate by testifying that risk reduction is not under FEMA's purview. Tr. 14197.

10.1.31. Applicants' testimony controverted the statement that accidents with warning times of one to two hours account for a significant portion of the accidents for which offsite protective actions would be warranted. Applicants' witnesses testified that such conditions are at the very end of the planning spectrum. At none of the transcript citations, Tr. 10330-33, 10345, 10409-10, did Applicants' witnesses testify that, considering a

hypothetical accident with relatively short warning times and the plume traveling toward the beach, the majority of beachgoers would not be able to clear the beach prior to plume arrival. Their testimony was to the effect that, given that the plume arrival time assumptions of Mass AG's hypothetical example would exceed evacuation time estimates for the beach population, the entire population would not, or may not, be evacuated prior to plume arrival. Mass AG's desired conclusion is not supported by the other citations he offered. The Goble et al. Dir., Post Tr. 10963 at 10 does not support the conclusion that a plume would reach the beach area within three to four hours after the onset of accident conditions, assuming one to two hours warning time. That testimony says only that a popular beach area is located less than two miles from the reactor. The Adler testimony, Adler Dir., Post Tr. 10911, Figure 1, is unconnected to the postulated scenario of Mass AG's proposed finding. Adler asserted that about one half of the vehicles involved in a voluntary evacuation after a beach closing announcement would remain within a three mile radius after three to four hours. FEMA has rejected the Baldwin analysis as an incorrect interpretation of the ETEs. Tr. 14169.

10.1.34. John Bonds testified that there is no assumption with regard to any fixed quantity of time whatsoever that would be afforded by precautionary measures. Tr. 10245. Callendrello testified that the purpose of an

Alert classification, where precautionary measures for the beach may be taken is in itself anticipatory and intended to bring offsite response organizations to a standby status. The State of New Hampshire has taken that one step further where it may begin to take actions that will expedite later protective actions if they should be needed. There is no assumption made beyond that which is already built into the definition of an Alert. Tr. 10244.

10.1.35. Callendrello testified that the half hour time frame from onset of conditions to release is a NUREG-0654 planning assumption that could possibly be applied to an Alert or an Unusual Event classification. Tr. 10311.

10.1.36. Applicants' witnesses testified only that an accident could start off classified as a General Emergency. They did not testify that precautionary measures would not be employed or that they could not provide additional time to evacuate. Tr. 10333.

10.1.38. Applicants' witnesses testified that if an accident commences as a General Emergency there are procedures in place for immediate notification of the public by the New Hampshire State Police if that were necessary. Tr. 10436, NHRERP, Volume 4B, State Police Communications Procedures, provide for the flexibility to get the most appropriate message aired in a timely manner for the spectrum of accident conditions. These procedures include the case when a severe situation is developing rapidly prior to

organizations being able to fully staff or assess the situation. App. Dir. No. 6, Post Tr. 10022, at 18. State Police Communications Center Procedures include instructions in the event the initial notification from the utility is a General Emergency. If the NHOEM cannot be contacted within 10 minutes, the State Police Shift Supervisor is instructed to contact the RCDC to activate sirens and, between May 15 and September 15, to broadcast the beach closing message on designated beach siren public address systems. The State Police Shift Supervisor is then instructed to contact the EBS station, WOKQ, and initiate broadcast of the pre-recorded General Emergency message. App. Ex. No. 5, Volume 4B, State Police Communications Center Procedures.

10.1.40. The testimony of the State of New Hampshire witnesses cited at Post Tr. 10377 is neither inconsistent nor contradictory. It is a State of New Hampshire response to Mass AG Interrogatory No. 9. The interrogatory itself contained a quote from the Manual of Protective Action Guides, US, EPA, p. 129 which includes the term "particulates". The State of New Hampshire did not even use the term in its response to the interrogatory.

10.1.46. FEMA testimony at FEMA Dir., Post Tr. 13968 at 10 reached no conclusion about the significance of dose reduction that would be achieved by sheltering nor about the prevalence of "unwinterized" shelters in the New Hampshire beach areas. It concluded only that sheltering followed by

evacuation is likely to be a less effective means of achieving dose reduction than evacuation alone, attributing the difference to the ground shine component.

10.1.48. Keller testified that in answering to Mass AG counsel's hypothetical, fast breaking, serious accident there were many unknown parameters, such as plume location, plume width and other unknowns, that lead to a generalized conclusion that there would be some dose savings for that one part of the accident spectrum. Tr. 14195.

10.1.50. Keller did not testify "that he could conceive" of a number of accident scenarios, even those involving a ground shine component, for which sheltering would be a preferred protective response for the summer beach population". He actually testified that given enough time and parameters, such as times and relative fractions, he could construct a scenario whereby the dose would be less for shelter first, then evacuation. Tr. 14231. In fact he subsequently testified that given the many unknowns and uncertainties of a severe accident scenario, the prudent decision for people within two to three miles of the site is evacuation. Tr. 14239-241. Tr. 14255-56.

10.1.56. What is proposed as the most considered treatment of the issue regarding the uncertainties of a release is in fact muddled miscomprehension. It is an engineering impossibility that "the reactor vessel melts through the core" thereby signaling an imminent release

depending on whether or not containment holds. Uncertainty is hardly relieved by Goble's conclusion that "you won't know which of those things will happen once you enter into core melt", Tr. 11663.

10.1.57. Goble gave no testimony to the effect that in situations where containment does not hold there would not be sufficient time to evacuate the beach. Tr. 11664.

10.1.58. Goble's testimony included no statement to the effect that evacuation times at this site would preclude at least a significant portion of the population from evacuating prior to plume arrival. Tr. 11664.

10.1.60. FEMA testimony, FEMA Dir., Post Tr. 13968 at 10, actually discussed dose reduction involving ground shine that would result from immediate evacuation. The testimony said, "In the extremely rare case where the evacuation routes coincide with the plume path, an estimate of the dose reduction can be made". Because of dispersion and dilution, the dose rate decreases with distance.

10.1.61. At none of the transcript citations does Goble testify that "inhalation of particulates could be a major contributor to total dose". In fact, when asked whether it is true that the greatest significance of the iodine release would be with respect to the inhalation dose, Goble responded no. Tr. 11623.

10.1.63. MacDonald's testimony at Tr. 10484 was not contradicted by either FEMA's or Goble's testimony. In fact,

the FEMA testimony is misrepresented. The testimony said that ground shine dose could potentially be the major contributor to total dose. FEMA Dir., Post Tr. 13968 at 10.

10.1.64. In none of the testimony cited does any witness concede "that it is quite unlikely that people could sit in their cars in the beach area for two hours on a hot summer day with the windows closed". State of New Hampshire and Applicant's witnesses certainly did not agree that the person inside the car would be apt to get particles on his or her skin. Tr. 10467.

10.1.67. A more accurate representation of Keller's testimony is that "dose reduction greater than those to be derived from a 'shelter first-evacuate later' concept can be obtained by movements of the population relatively short distances even in the extremely unlikely case where the plume track and the evacuation routes coincide". Nowhere in the cited transcript does Keller say that this proposition assumes that by evacuation the population, or some significant portion of the population will be able to move some distance further away from the reactor prior to plume passage. The ETE testimony of Applicants' witness cited at Tr. 5715-16 and Tr. 6714-715 does not support the assertion that the vast portion of total evacuation time for each car will be spent in the beach area nor that at some points the evacuation routes will bring cars closer to the reactor.

10.1.88. Bonds testified that with respect to the New Hampshire beach areas north of Great Boar's Head the shelter-in-place concept still applies. Transients without access to indoor locations would be expected to evacuate. Tr. 10204. Richard Strome testified that the beaches north of Great Boar's Head are not the larger beaches in the area. They generally carry a much smaller beach population and do not require the kind of specific attention given the heavily populated beach area in Hampton Beach. The provisions are located in the planning documents to handle that population. There is certainly provision in the plan to get information to people in North Hampton and Rye. Tr. 10203. Strome further testified that the planning documents provide guidelines for action. There is subjectivity involved in the decisionmaking process that allows decision makers to exercise precautionary measures in the area north of Great Boar's Head. Tr. 10199.

10.1.90. Cumming testified for FEMA that implementing detail exists in the NHRERP for the transportation dependent beach transients. Where the plan calls for sheltering the rest of the beach transients, that is a different factor. Where the plan calls for ad hoc sheltering in place for the full beach transient population, that is adequate. Tr. 14252-253. This testimony is consistent with McLoughlin's testimony that the NHRERP is adequate with respect to NUREG-0654 planning criteria J-9 and J-10.m in that the probable

incidence of the requirement of shelter for other than the transportation dependent beach transients is not very significant.

10.1.91. The State of New Hampshire has proposed to amend the NHRERP to include implementing details for sheltering the transportation dependent transient beach population. App. Dir. No. 6, Post Tr. 10022, Appendix 1, page 10 of 47. These include specifically designed EBS messages and identification of structures for this segment of the population.

10.1.94. Goble testified that the sheltering criteria he espouses were not drawn from any literature or any recognized source and nowhere in his testimony at Tr. 11327-328 does he identify Dr. Mileti as a source for any of these criteria.

10.1.98. The NHRERP has been amended to include an EBS message advising the transportation dependent transient beach population to shelter and provides for identification of shelter locations for this segment of the population.

10.1.99. Callendrello testified that there are provisions for training DRED personnel, including lifeguards, to respond to a radiological emergency. Tr. 10570.

10.1.106. Evdokimoff testified that the 459 cottages that he inspected externally were not selected randomly and that he made no measurements during the survey. Tr. 11342-343.

10.1.123. The only error established in the record at Tr. 10618-631 was the inclusion of 2886 square feet of space that had been torn down out of a total of 110,000 square feet of space which comprises the Hampton Beach Casino. Tr. 10625.

10.1.128. Goble admitted on cross examination that he was not saying that structures with 0.9 dose reduction factor for cloud shielding offers less shielding than no protection at all. He also admitted that the Aldrich reference of Goble et al Dir., Post Tr. 10963 at 67 was using a weekly average based on the types of structures in which people are normally located.

10.1.129. Applicants' witnesses testified that the statement in question referred strictly to the purpose of the first Scane and Webster Shelter Study, March 1986, which was to identify structures with shielding comparable to masonry structures. The first study was done as a scoping document for an arrangement then being undertaken between New Hampshire Yankee and the Commonwealth of Massachusetts. Tr. 10607-610.

10.1.138. Callendrello further testified that if no shelter were available the dose saving principle would lead to a decision to evacuate. Tr. 10758.

10.1.145. Mileti also testified that there is much empirical evidence that suggests that the hypothesis offered in this statement is the only prudent hypothesis any

scientist could offer. Tr. 10050. The lack of empirical evidence to the contrary supports Mileti's confidence in that conclusion. Tr. 10138.

10.1.147-148. The surveys were inconsistent and showed different responses with respect to the same properties. The Mass AG survey contained a built-in bias in that it identified the survey as being conducted for the Massachusetts Attorney General. See Applicants' Proposed Findings 10.1.59 and 10.1.60.

10.1.59. Mileti further testified that such a hypothetical does not transcend to emergency planning for nuclear power plants. Tr. 10132.

10.1.137. It is illogical to conclude that the percentage of buildings with reduction factors less than 0.9 or air exchange rates greater than 2 per hour would be relatively high when there is no reference in the record to any number.

10.1.163-164. Eckert offered that the response to the motel/hotel owner's survey instrument was very low in number (10) and therefore does not qualify for statistical analysis or as a basis for drawing conclusions. Goble et al. Dir., Post Tr. 10963 at 66. Applicants do not concede that hotel and motel rooms comprise the vast majority of the potential shelter space. No party established this as a fact. Tr. 11639.

10.1.172-178. See Applicants' Proposed Finding 10.1.178.

10.1.184. The NHRERP's protective action decisionmaking provisions conform to U.S. Environmental Protective Agency guidance as required by NUREG-0654, II., J.9. App. Dir. No. 6, Post Tr. 10022 at 1.

Respectfully submitted,

George H. Lewald/KAS

Kathy A. Selleck

Thomas G. Dignan, Jr.
George H. Lewald
Kathryn A. Selleck
Ropes & Gray
225 Franklin Street
Boston, MA 02110
(617) 423-6100

BOCKETED
USNRC

'88 SEP -6 P4:46

CERTIFICATE OF SERVICE

I, Kathryn A. Selleck, one of the attorneys for the Applicants herein, hereby certify that on August 31, 1988, I made service of the within document by depositing copies thereof with Federal Express, prepaid, for delivery to (or, where indicated, by depositing in the United States mail, first class postage paid, addressed to):

Administrative Judge Ivan W. Smith
Chairman, Atomic Safety and
Licensing Board Panel
U.S. Nuclear Regulatory
Commission
East West Towers Building
4350 East West Highway
Bethesda, MD 20814

Robert Carrigg, Chairman
Board of Selectmen
Town Office
Atlantic Avenue
North Hampton, NH 03862

Judge Gustave A. Linenberger
Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory
Commission
East West Towers Building
4350 East West Highway
Bethesda, MD 20814

Diane Curran, Esquire
Andrea C. Ferster, Esquire
Harmon & Weiss
Suite 430
2001 S Street, N.W.
Washington, DC 20009

Dr. Jerry Harbour
Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory
Commission
East West Towers Building
4350 East West Highway
Bethesda, MD 20814

Stephen E. Merrill
Attorney General
George Dana Bisbee
Assistant Attorney General
Office of the Attorney General
25 Capitol Street
Concord, NH 03301-6397

Adjudicatory File
Atomic Safety and Licensing
Board Panel Docket (2 copies)
U.S. Nuclear Regulatory Commission
East West Towers Building
4350 East West Highway
Bethesda, MD 20814

Sherwin E. Turk, Esquire
Office of General Counsel
U.S. Nuclear Regulatory
Commission
One White Flint North, 15th Fl.
11555 Rockville Pike
Rockville, MD 20852

*Atomic Safety and Licensing
Appeal Board Panel
U.S. Nuclear Regulatory
Commission
Washington, DC 20555

Robert A. Backus, Esquire
116 Lowell Street
P. O. Box 516
Manchester, NH 03105

Philip Ahrens, Esquire
Assistant Attorney General
Department of the Attorney
General
Augusta, ME 04333

Paul McEachern, Esquire
Matthew T. Brock, Esquire
Shaines & McEachern
25 Maplewood Avenue
P.O. Box 360
Portsmouth, NH 03801

Mrs. Sandra Gavutis
Chairman, Board of Selectmen
RFD 1 - Box 1154
Route 107
Kensington, NH 03827

*Senator Gordon J. Humphrey
U.S. Senate
Washington, DC 20510
(Attn: Tom Burack)

*Senator Gordon J. Humphrey
One Eagle Square, Suite 507
Concord, NH 03301
(Attn: Herb Boynton)

Mr. Thomas F. Pow. 's, III
Town Manager
Town of Exeter
10 Front Street
Exeter, NH 03833

H. Joseph Flynn, Esquire
Office of General Counsel
Federal Emergency Management
Agency
500 C Street, S.W.
Washington, DC 20472

Gary W. Holmes, Esquire
Holmes & Ells
47 Winnacunnet Road
Hampton, NH 03841

Mr. J. P. Nadeau
Selectmen's Office
10 Central Road
Rye, NH 03870

Carol S. Sneider, Esquire
Assistant Attorney General
Department of the Attorney
General
One Ashburton Place, 19th Fl.
Boston, MA 02108

Mr. Calvin A. Canney
City Manager
City Hall
126 Daniel Street
Portsmouth, NH 03801

R. Scott Hill-Whilton, Esquire
Lagoulis, Clark, Hill-
Whilton & McGuire
79 State Street
Newburyport, MA 01950

Mr. Peter J. Matthews
Mayor
City Hall
Newburyport, MA 01950

Mr. William S. Lord
Board of Selectmen
Town Hall - Friend Street
Amesbury, MA 01913

Charles P. Graham, Esquire
Murphy and Graham
33 Low Street
Newburyport, MA 01950

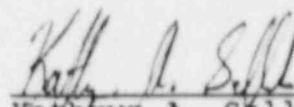
Richard A. Hampe, Esquire
Hampe and McNicholas
35 Pleasant Street
Concord, NH 03301

Mr. Ed Thomas
FEMA, Region I
442 John W. McCormack Post
Office and Court House
Post Office Square
Boston, MA 02109

Ashod N. Amirian, Esquire
376 Main Street
Haverhill, MA 01830

Judith H. Mizner, Esquire
79 State Street, 2nd Floor
Newburyport, MA 01950

Leonard Kopelman, Esquire
Kopelman & Paige, P.C.
77 Franklin Street
Boston, MA 02110



Kathryn A. Selleck

(* = Ordinary U.S. First Class Mail)