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STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
ATOMIC SAFETY AND LICENSING BOARD

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BEFORE ADMINISTRATIVE JUDGES:

Helen F. Hoyt, Chairman

Dr. Emmeth A. Luebke

Dr. Jerry Harbour

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

In the Matter of)

PUBLIC SERVICE COMPANY OF)

NEW HAMPSHIRE, et al.)

(Seabrook Station, Units 1 and 2))

Docket Nos.

50-443-OL

50-444-OL

October 26, 1983

ATTORNEY GENERAL BELLOTTI'S
PROPOSED FINDINGS OF FACT AND
CONCLUSIONS OF LAW RE NECNP
CONTENTIONS III.12 and 13

Pursuant to 10 C.F.R. §2.754, Attorney General Bellotti hereby files his proposed findings of fact and conclusions of law relative to NECNP Contentions III.12 and 13, the only contentions on which he participated at the August hearings. In reviewing the transcripts of the hearing sessions, we have noted a number of errors which will be the subject of a separate motion. We note now, however, that Exhibit 2 to the Applicants' Direct Testimony, containing their full evacuation time study, was never included in the transcript. (The original study as contained in the FSAR was included in the transcript instead.) We are unable at this point, therefore, to provide official cites for Exhibit 2 and relevant portions

thereof and simply cite to the pages of the Exhibit as it was filed with the Board and served on the parties prior to the hearing.

In addition to addressing the two items remaining for litigation under NECNP Contentions III.12 and 13 as redrafted by the Board -- namely, summer adverse weather evacuation times and simultaneous beach area evacuation times -- these proposed findings and conclusions address the issue of "preparation time." Motions have been filed by Attorney General Bellotti and others for reconsideration of the Board's summary dismissal of NECNP III.12 and 13 to the extent they challenged the Applicants' failure to consider preparation time. The Applicants have argued that, while the basis which the Board gave for its summary dismissal on this point was in error, that result can be upheld on the ground that the issue of preparation time was not covered by the original contention. See Applicants' Response to "Motion of Attorney General Francis X. Bellotti for Leave to File Responses to the Answers of the Staff and Applicants to His Motion for Reconsideration of Board Ruling on Preparation Time," [hereinafter, "Applicants' Response"], at 7. That assertion is incorrect, for NECNP Contentions III.12 and 13 as submitted included a general challenge to the accuracy of the Applicants' evacuation time estimates and did not purport to specify all respects in which they were inaccurate.

Moreover, as the Applicants themselves acknowledge, NECNP submitted an expert affidavit in opposition to the motion for summary dismissal specifically raising the preparation time issue. Applicants' counsel now attempt to refute that expert testimony through their own "testimony" that preparation time is covered by the Applicants' estimates.^{1/} However, the Applicants offered no counter-affidavit at the time the summary disposition motion was before the Board and there is no basis whatsoever for the Board to grant summary disposition on the issue. ^{2/}

The Applicants have suggested, in the alternative, that the Board reverse its order striking certain testimony offered by Attorney General Bellotti at the August hearings on the

^{1/} The passage which they cite from the FSAR in fact confirms that preparation time is not included, for it indicates that the estimates are from the start of the actual evacuation. See Applicants' Response, at 9, n.7.

^{2/} Nor do the Applicants get any mileage out of the alleged failure by NECNP to supplement answers to interrogatories to include the preparation time issue or specifically to mention it in their Statement of Material Disputed Facts. See Applicants' Response, at 7-9. There being no deadline for supplementation of the interrogatory responses, NECNP was under no obligation to do so prior to the action on the summary disposition motion. Furthermore, NECNP's expert affidavit clearly indicated its concern on that issue and the Applicants were in a position to respond to it at that time. NECNP's Statement of Material Disputed Facts simply contained the general assertion that the Applicants' estimates were inaccurate and failed to provide information needed by decision-makers. It is the expert affidavit accompanying that filing which specified the inaccuracies, including the failure to account for preparation time.

preparation time issue and consider that testimony as well as testimony elicited on cross-examination in ruling on whether the Applicants have properly considered the phenomenon of preparation time. The Applicants have agreed to waive their right to cross-examine Professor Herr on his testimony on this issue in an effort to obviate the need for further hearings. See Applicants' Response, at 9-11, and particularly p.11, n.9. Attorney General Bellotti agrees that cross-examination was allowed at the August hearing on the preparation time issue. While Professor Herr's proffered testimony on the point was, due to the Board's prior summary disposition order, directed at the validity of the Applicants' beach area estimate, we feel that the significance of his testimony for the Applicants' entire time study is sufficiently obvious (and supported by testimony of the Applicant and Staff witnesses at the hearing) that we are in agreement with the Applicants' alternative suggestion that Professor Herr's testimony now be admitted and the issue considered ripe for decision.

Accordingly, we have included herein proposed findings and conclusions on the Applicants' failure properly to address the preparation time phenomenon in their evacuation time study generally. We caution that, even if the Board does not decide to accept Professor Herr's testimony and address the preparation time issue generally, testimony elicited on cross-examination of other witnesses demonstrates that the

Applicants' beach area estimate is unreliable because of their failure properly to consider this element of overall evacuation time. The findings and conclusions herein, while drafted to apply to all of the Applicants' estimates, are equally applicable to the simultaneous beach area estimate in particular.

FINDINGS OF FACT

1. The evacuation time estimates provided by the Applicants in Appendix C to the Seabrook Station Radiological Emergency Plan contained in the FSAR [hereinafter, "Appendix C"] fail to include any estimate of the time for evacuating during summer adverse weather conditions. See Appendix C. See also App. Dir., Post Tr. 1016, at 18-19; Direct Testimony of Dr. Urbanik, Post Tr. 1304, at 2.

2. The evacuation time estimates provided by the Applicants in Appendix C fail to include any estimate for simultaneous evacuation of the full plume exposure pathway EPZ or simultaneous evacuation of the beach areas lying northeast to south-southeast of the site. See Appendix C. See also App. Dir., Post Tr. 1016, at 18-19.

3. In response to the Board's Order of June 30, 1983, declining summarily to dismiss NECNP Contentions III.12 and III.13 to the extent they challenged the Applicants' failure to provide a summer adverse weather estimate, the Applicants prepared for the first time an evacuation time estimate for simultaneous evacuation of the entire EPZ under a peak weekend

population adverse weather scenario. App. Dir., Post Tr. 1016, at 19, n.2. That estimate was first provided to the Board in the Applicants' Direct Testimony. Tr. 1035; Rebuttal Testimony of Dr. Urbanik, Post Tr. 1304, at 2.

4. In Exhibit 2 to their Direct Testimony, Applicants provided to the Board for the first time evacuation time estimates for simultaneous evacuation of the entire EPZ. App. Dir., Post Tr. 1016, at 18-19 and 19, n.2; Tr. 1034-35. Those estimates were the first ever submitted to the Board which reflect simultaneous evacuation of the beach areas lying northeast to south-southeast of the site. App. Dir., Post Tr. 1016, at 20.; Tr. 1036 - 1037; Rebuttal Testimony of Dr. Urbanik, Post Tr. 1304, at 1.

5. Applicants now estimate that it will take 6 hours and 5 minutes to evacuate the beach areas lying northeast to south-southeast of the site on a summer weekend in fair weather. App. Dir., Post Tr. 1016, at 19-20.

6. Applicants now estimate that it will take 9 hours and 15 minutes to evacuate the entire EPZ on a summer weekend in adverse weather. App. Dir., Post Tr. 1016, at 20.

7. There are two purposes served by the evacuation time estimates which the Commission requires applicants to prepare. Thus, the estimates are required as a tool both for emergency planners and protective action decision-makers. Tr. 1078-79, 1305; Rebuttal Testimony of Dr. Urbanik, Post Tr. 1304, at 2.

8. Evacuation time estimates prepared by applicants must provide a sufficient data base to aid a realistic assessment of the options and allow for informed protective action decisions. Tr. 1307-1312; Rebuttal Testimony of Dr. Urbanik, Post Tr. 1304, at 2.

9. The Applicants' evacuation time estimates are not estimates which could be used by decision-makers at the time of an emergency. Tr. 1106-07, 1329.

10. Only after the various evacuation time studies that have been prepared are reviewed, experiences of local officials considered, and detailed local plans prepared can the evacuation time estimates which the Commission requires for use by decision-makers at the time of an emergency be developed. Tr. 1325, 1328-29.

11. The Applicants' evacuation time estimates are optimistic and depend implicitly on attaining a high level of efficiency in utilization of the available transportation network. Tr. 1316-17, 1321, 1383.

12. In the absence of plans for traffic management and control, there is no assurance that evacuees will make the route choices assumed by the Applicants. Tr. 1373.

13. There is no assurance that evacuees will make the route choices assumed by the Applicants because their model, in accounting for driver choices at intersections, presumes knowledge of traffic conditions along the entirety of the next

link as defined by the model, a presumption which is not necessarily accurate and which is clearly less accurate for nonresidents (such as the beach population) than residents. Tr. 1041-42.

14. The combination of peak populations and summer adverse weather is not at all unrealistic. Testimony of Philip B. Herr, Post Tr. 1196, at 3; Rebuttal Testimony of Philip B. Herr, Post Tr. 1196, at A.03 - A.05; Tr. 1092-93.

15. Rain is not the only foreseeable summer adverse weather condition. Tr. 1403.

16. Fog and rain reduce travel speeds and road capacity through reducing visibility and reducing braking effectiveness. Fog can render roadways impassable. Flooding reduces travel speeds and can render roadways impassable. Testimony of Philip B. Herr, Post Tr. 1196, at 3-5; Testimony of Robert Mark, Post Tr. 1190, at 8; Tr. 1091-92, 1409.

17. There is a continuum of effect on roadway capacity from adverse weather conditions. Tr. 1091-92; Testimony of Philip B. Herr, Post Tr. 1196, at 3-5.

18. The only summer adverse weather condition which the Applicants have examined is the relatively benign one of fog or rain reducing road capacities by 30%. Worse conditions are commonly observed at Seabrook, including flooding of one or

more egress roads, a contingency not even mentioned by the Applicants in their study. Rebuttal Testimony of Philip B. Herr, Post Tr. 1196, at A.06; Testimony of Robert Mark, Post Tr. 1190, at 8.

19. Flooding is a critical contingency at Seabrook. Hampton Beach, Seabrook Beach, and Salisbury Beach are all developed on barrier beaches separated from the mainland, except at the north of Hampton Beach, by either rivers or wide marshes. Only four roads, three on fill just higher than marsh level, provide connections between those three beaches and the mainland. Flooding in the area is a coastal phenomenon, associated not only with rain but also with wind and tide such that any time wind, tide, and even a relatively small amount of rain coincide there can be water on the roads very quickly. At least once or twice a year roads in the Hampton Beach area are flooded. Occasionally they are rendered impassable and, on one occasion in 1978, they remained impassable for two days. Flooding as an interdicting possibility in the Seabrook area is corroborated by FEMA Flood Hazard Maps. Tr. 1250; Testimony of Philip B. Herr, Post Tr. 1196, at 5; Testimony of Robert Mark, Post Tr. 1190, at 8; Rebuttal Testimony of Philip B. Herr, Post Tr. 1196, at A.06 and Exhibits A-D.

20. The Applicants have provided no estimates reflecting anything less than peak population in combination with summer adverse weather. Tr. 1093-94.

21. The Applicants have conducted no studies to establish and cannot state the relationship between reduction in roadway capacity due to adverse summer weather and increase in evacuation times. Tr. 1120-21.

22. In preparing their summer adverse weather estimates, the Applicants made no inquiries of local officials as to the effects they may have observed of adverse conditions on roadways in the area. Tr. 1071.

23. Professor Herr has extensive experience in emergency response planning, both generally and for areas surrounding nuclear facilities, in transportation and traffic planning, in analyzing computer evacuation simulations, and in preparing development schemes and designing response systems and hazard avoidance systems and strategies to account for meteorological phenomena, in particular flooding. He further has extensive familiarity with the Seabrook area. Professor Herr's opinions on the matters before the Board are, therefore, entitled to great weight. Testimony of Philip B. Herr, Post Tr. 1196, at 2-3 and Exhibit A; Tr. 1198, 1246, 1251-52; 1257.

24. Where the expert opinions offered at trial conflict, Professor Herr's opinions are entitled to the greatest weight because of his more extensive familiarity with the Seabrook area, because of Mr. MacDonald's employment relationship with Yankee Atomic and admitted bias on the issues before the Board, because of Mr. Merlino's pecuniary interest in the outcome of

the proceeding and former employment relationship with Yankee Atomic, and because of Dr. Urbanik's evasiveness and hostile attitude under cross-examination. Tr. 1018-1026.

25. Evacuation time estimates, to be useful tools for emergency planners and protective action decision-makers, must consider the possibility that one or all of the roads separating Hampton Beach, Seabrook Beach, and Salisbury Beach from the mainland may be flooded when evacuation is being attempted. Testimony of Philip B. Herr, Post Tr. 1196, at 5.

26. The Applicants' estimate for summertime adverse weather conditions is unreliable because they have not explored the effect on that evacuation time of the loss of power which can accompany adverse weather and disable notification, communications, and traffic control systems. Testimony of Philip B. Herr, Post Tr. 1196, at 3.

27. The Applicants' estimate for summertime adverse weather conditions is inadequate and fails to provide information needed by emergency planners because they failed to make selections of effects along a continuum in order to demonstrate the sensitivity of evacuation times in the area to weather. Tr. 1211.

28. It is important for emergency planners and protective action decision-makers to have reliable estimates of the time required to evacuate simultaneously the beaches from northeast to south-southeast of the Seabrook site because a protective

action order is likely to include beaches both north and south of the site, regardless of projected wind direction. Testimony of Philip B. Herr, Post. Tr. 1196, at 5.

29. The Applicants' evacuation time study did not take into effect in any way the possible or probable occurrence of accidents or vehicles running out of gas. Tr. 1085-86, 1100.

30. Accidents can occur and vehicles can run out of gas during evacuations. Tr. 1114.

31. The computer model employed by the Applicants' consultants in preparing their evacuation time study is capable of assessing the impact of traffic accidents on evacuation times. Tr. 1099.

32. There is literature which provides statistical data on the frequency of accidents on freeways and the length of delay associated therewith. Tr. 1115-16.

33. There are two expressways in the vicinity of the Seabrook site. Tr. 1117.

34. The Applicants' consultants did not engage in any discussions with local officials about typical locations of traffic accidents or delay time associated therewith. Tr. 1100.

35. There are only four egress routes from Hampton Beach, Seabrook Beach, and Salisbury Beach to the mainland. Testimony of Philip B. Herr, Post Tr. 1196, at 5.

36. In preparing evacuation time estimates, consideration must be given to the impact of peak populations, including

behavioral aspects and, in particular, behavioral response to any attempts at nonradial dispersion. Tr. 1332-33, 1389-90.

37. The Applicants' consultants have limited knowledge regarding driver behavior during evacuations, but admit that a correlation may well exist between the length of an evacuation and breakdown in driver discipline. Tr. 1098, 1104.

38. Some people become very emotional during evacuations and disobey traffic controls. Testimony of Robert Mark, Post Tr. 1190, at 7-8.

39. The Applicants' evacuation time study assumes normal traffic controls are obeyed and traffic lanes used in the conventional manner, regardless of the length of the evacuation. Tr. 1101, 1104.

40. The Applicants' evacuation time study does not account for the effect on evacuation times of non-evacuating traffic, including work-to-home travel, trips by emergency vehicles, and trips in preparation for evacuation. The Applicants have not determined the numbers of vehicles which are likely to be involved in such travel or quantified the effect of those trips on evacuation times. Tr. 1101-1104.

41. An actual experience with evacuation of Hampton Beach demonstrates that the Applicants' simultaneous beach area estimate of approximately six hours is understated. In 1977, it took approximately 3-1/2 hours to evacuate just 7,000 people from the Hampton Beach area in the evening. The Applicants

estimate, however, that it will take less than double that time to evacuate 40,000 transient vehicles, together with the permanent population within ten miles, on a summer weekend. Testimony of Robert Mark, Post Tr. 1190, at 7; Exhibit 2 to Applicants' Direct Testimony, at 2-1 - 2-6 and Figure 6.

42. The evacuation time study commissioned by the NRC indicates that the Applicants' estimates are optimistic, for it arrived at estimates 60-84% higher than those of the Applicants. Tr. 1330, 1365.

43. The NRC's evacuation study used higher population figures than did the Applicants' study. Tr. 1331.

44. Comparisons between the Applicants' estimated evacuation times and those estimated in the study for the New Hampshire Civil Defense Agency (the Maguire Study) reveal disparities of as much as 47%. And there are disparities between the Applicants' study and the study commissioned by the NRC (the PNL study) as great as 180%, and between the PNL and Maguire studies as great as 90%. Testimony of Philip B. Herr, Post Tr. 1196, at 12.

45. The NRC Staff's consultants estimate that it will take approximately 12 hours to evacuate the entire EPZ on a summer weekend in adverse weather. Tr. 1413.

46. Evacuation time for Seabrook could be as high as 24 hours. Tr. 1365.

47. The wide variances in evacuation time estimates as developed by the Applicants and by others, including the NRC's consultants and the New Hampshire Civil Defense Agency, give evidence that the predictive ability of the Applicants' simulation is too poor to be relied upon as a planning and management aid.

48. The evacuation time estimates for Seabrook are the longest that the NRC Staff's expert is aware of, with the exception of estimates which are in his opinion conservative. Tr. 1356, 1454.

49. In preparing evacuation time estimates, estimates must be made of the time required to evacuate those dependent on public transportation. Tr. 1332.

50. The Applicants' evacuation time study does not contain estimates of the time required to evacuate those dependent on public transportation. See Appendix C; Exhibit 2.

51. The Applicants, in arriving at their evacuation time estimates, did not account for preparation time, either by separately computing the maximum time required for that component of evacuation time and adding it to the other components or by developing distribution functions for that stage of evacuation, but rather relied on loading rates as a surrogate for preparation time. Tr. 1038, 1044, 1047; Exhibit 2, at 5-1 - 5-3.

52. While the Applicants' consultants admit that there is a spectrum of time required for people to prepare to evacuate, they have not arrived at distribution functions reflecting that spectrum. Tr. 1052-54.

53. The Applicants' consultants have not consulted with local officials about the preparation time phenomenon. That is the manner in which they would either estimate maximum preparation time or arrive at a distribution function for that component of evacuation time. Tr. 1047-48.

54. The Applicants' consultants purport to have conducted a sensitivity analysis in an effort to assess whether, in their opinion, they should account for preparation time -- either by means of a maximum time estimate for that component or a distribution function. Tr. 1054-55. No such analysis is contained in Appendix C or Exhibit 2 and none has been made available to the Board or parties for review. See Appendix C; Exhibit 2.

55. Families visiting Hampton Beach typically split up in all directions, with parents doing one thing and children another. It may take family members a considerable length of time to locate each other for an evacuation. Some people will make trips in their cars looking for family members. Testimony of Police Chief Robert Mark, Post Tr. 1190, at 8.

56. Applicants' use of a constant vehicle loading rate of 20 vehicles per minute per node (summer weekdays for major

employers being the only exception) is an unsupportable oversimplification of the mobilization or preparation time phenomenon. Rebuttal Testimony of Philip B. Herr, Post Tr. 1196, at A.08.

57. Applicants' analysis implies faster loading onto the network than would result from analysis of the actual preparation phenomenon. Studies of preparation time at other sites have resulted in median preparation times which are triple the mean time imputed by the Applicants' 20 vehicle per hour loading rate. Rebuttal Testimony of Philip B. Herr, Post Tr. 1196, at A.08.

58. Preparation times vary for different areas and judgments must be made about the characteristics of particular areas in estimating those times. Tr. 1313.

59. If ninety-five percent of the people on the beach would take more than 15 or 20 minutes to prepare to evacuate then, in the opinion of the Staff's witness, the Applicants' beach area estimates would be unduly low. The Staff's witness has no knowledge as to the percentage of beachgoers at Seabrook who would take longer than that period in preparation. Tr. 1314-15.

CONCLUSIONS OF LAW

1. The Applicants are required to provide an analysis of the time required to evacuate various sectors and distances

within the plume exposure pathway EPZ for transient and permanent populations. 10 C.F.R. Part 50, Appendix E, Section IV. See also NUREG-0654/FEMA-Rep-1, Rev. 1: "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November, 1980, [hereinafter, "NUREG-0654"] at 61, Criterion J.8. [The criteria of NUREG-0654 are expressly incorporated into the Commisison's regulations at 10 C.F.R. §50.47(b), n.1 and Appendix E, Section IV, n.4.]

2. Evacuation time estimates are required for simultaneous evacuation of the entire plume exposure pathway EPZ.

NUREG-0654, App. 4, at 4-4.

3. Both normal and adverse weather conditions must be analyzed. NUREG-0654, App. 4, at 4-6.

4. The adverse weather frequency used in the analysis must be identified and must be severe enough to define the sensitivity of the analysis to the selected events.

NUREG-0654, App. 4, at 4-6.

5. In the case of a northern site with a high summer tourist population, applicants should consider summer adverse weather conditions, such as rain, flooding or fog. NUREG-0654, App. 4, at 4-7.

6. Evacuation time is composed of several components, each of which must be estimated in order to determine the total evacuation time. NUREG-0654, App. 4, at 4-6.

7. The time required for persons to prepare to evacuate is one of the components of evacuation time which must be computed. In doing so, applicants can either compute the maximum time required for preparation and add that to the maximum time required for each of the other components or they can develop distribution functions for the various evacuation time components and combine them. When distribution functions are used, estimates are made of the likelihood that each stage in an evacuation sequence will be accomplished within a given period of time, which conditional probabilities depend upon completion of the preceding stage. Some of the distribution functions must be based on the judgment of the estimators. Where distribution functions are used, the following requirements apply: computation of the joint distribution functions of evacuation times must be made; distribution functions for notification of the various categories of the evacuee population must be developed, the distribution functions for the action stages after notification must predict what fraction of the population will complete a particular action within a given span of time; there must be separate distributions for auto-owning households, school population, and transit dependent populations and the percentage of the population as a function of time must be reported. NUREG-0654, App. 4, at 4-7, 4-8, and 4-10.

8. Applicants must estimate the time required to evacuate persons dependent on public transport. NUREG-0654, App. 4, at 4-9.

9. In arriving at evacuation time estimates for peak populations, applicants must take behavioral considerations into account. NUREG-0654, App. 4, at 4-10.

10. The Applicants' estimate of the time required to evacuate the EPZ on a summer weekend in adverse weather [hereinafter, the "adverse weather estimate"] and its estimate of the time required to evacuate simultaneously the entire EPZ, and thus the beach areas lying northeast to south-southeast of the site, on a summer weekend in fair weather [hereinafter, the "beach area estimate"] do not satisfy the Commission's requirements because they could not be used by decision-makers at the time of an emergency. The estimates are optimistic and depend implicitly upon attaining a high level of efficiency in utilization of the available transportation network. Especially given the existence of a number of evacuation time studies having wide disparities, it is only after the various studies are reviewed, experiences of local officials considered, and detailed local plans prepared that the evacuation time estimates which the Commission requires for use by decision-makers at the time of an emergency can be developed.

11. The Applicants' adverse weather estimate of nine hours and fifteen minutes is unreliable and fails to provide a

sufficient data base for emergency planners and protective action decision-makers because they have not examined the effect on evacuation times of interdiction of one or more of the four egress routes from the beach areas to the mainland due to flooding, they have not explored the effect on evacuation time of the loss of power which can accompany adverse weather and disable notification, communications, and traffic control systems, they have not made selections of effects along a continuum in order to demonstrate the sensitivity of evacuation times in the area to weather, they have provided no summer adverse weather estimates for populations other than the peak weekend population, and they have not accounted for the effect of vehicles running out of gas during such a slow-moving evacuation.

12. The Applicants' beach area estimate is unreliable and fails to provide a sufficient data base for emergency planners and protective action decision-makers because they failed to account for the effect on evacuation times of accidents or vehicles running out of gas on one or more of the four egress routes from the beach area, despite the existence of data sources on the location and frequency of accidents and delay times associated therewith.

13. The Applicants' beach area and adverse weather estimates are unreliable because there has been no consideration of evacuee behavioral response, including

breakdowns in driver discipline due to the length of the evacuation, despite local experience with driver disobedience of traffic controls during evacuation and the unusual length of the evacuation times for this site.

14. The Applicants' beach area estimate is an unreliable tool for emergency planners and protective action decision-makers because it does not account for the effect on evacuation time of non-evacuating traffic.

15. The Applicants' beach area estimate is unreliable as a planning and management aid because it is grossly inconsistent with an actual experience with evacuation of Hampton Beach and with estimates prepared for the NRC and the New Hampshire Civil Defense Agency. Professor Herr's experience driving in the beach area one day does not in any way confirm either of the Applicants' estimates, since he was not involved in an evacuation where all persons in the area were attempting to travel at once.

16. The Applicants' beach area estimate fails to provide required information in that it fails to estimate the time required to evacuate transients dependent on public transportation.

17. The Applicants' evacuation time study does not satisfy Commission requirements because it does not account for preparation time in either of the two manners permitted by NUREG-0654. Even if NUREG-0654 had not been incorporated into

the Commission's regulations, the Applicants have supplied no basis for a conclusion that its requirements should not be applied here since the sensitivity analysis which they purport to have conducted has never been submitted to the Board or parties for review.

Respectfully submitted,

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Dated: October 26, 1983

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I, Jo Ann Shotwell, Esquire, counsel for Massachusetts Attorney General Francis X. Bellotti, hereby certify that on October 26, 1983, I made service of the Attorney General Bellotti's Motion For Correction of Transcript and Attorney General Bellotti's Proposed Findings of Fact and Conclusions of Law Re NECNP Contentions III.12 and 13 by mailing copies thereof, postage prepaid, to the parties named below:

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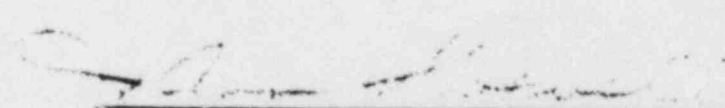
Anne Verge, Chairperson
Board of Selectmen
Town Hall
South Hampton, NH 03842

Maynard B. Pearson
Board of Selectmen
40 Monroe Street
Amesbury, MA 01913

Mr. Daniel Girard
Civil Defense Director
25 Washington Street
Salisbury, MA 01930

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

Signed under the pains and penalties of perjury, this 26th day of
October, 1983.



Jo Ann Shotwell
Assistant Attorney General
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