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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

OFFICE OF SECRETARY  
DOCKETING SERVICE  
BRANCH

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

NRC STAFF'S SUPPLEMENTAL PROPOSED  
FINDINGS OF FACT AND CONCLUSIONS OF LAW  
WITH RESPECT TO SPMC AND EXERCISE CONTENTIONS

The NRC Staff herewith files its supplemental proposed findings of fact and conclusions of law in response to the proposed findings of fact and conclusions of law filed by the various Intervenor on or before August 14, 1989. These supplemental proposed findings and conclusions do not reproduce the Intervenor's findings, nor are all of the Intervenor's proposed findings and conclusions addressed herein. Rather, the Staff relies upon its initial filing of August 24, 1989, <sup>1/</sup> and has elected to respond herein only to a limited number of the Intervenor's proposed findings and conclusions. The Staff's determination not to respond to other of Intervenor's proposed findings and conclusions is governed by time constraints and by our continued reliance upon our initial filing, and does not, by any means, signify Staff concurrence in those other statements by Intervenor.

<sup>1/</sup> "NRC Staff's Proposed Findings of Fact and Conclusions of Law With Respect to the Seabrook Plan for Massachusetts Communities and the Exercise Contentions," dated August 24, 1989 ("Staff Findings").

D507

For ease of reference, the Staff has utilized the Intervenor's paragraph numbering system without alteration in order to indicate the paragraphs to which these supplemental findings are addressed. Abbreviations have been used denoting each Intervenor's proposed findings, in accordance with the established practice in this proceeding.

1. BACKGROUND AND INTRODUCTION

MAG 1.15.A-1.15.B.4. Despite the Mass AG's suggestion to the contrary, it is clear that the Commonwealth of Massachusetts and the six Massachusetts towns within the Seabrook EPZ have refused to participate in emergency planning for Seabrook Station. See, e.g. Tr. 15237-39; Tr. 15039-41, 16045-46, 16049, 16050, 16052. This refusal has required the Applicants to develop a utility plan, the SPMC, pursuant to 10 C.F.R. § 50.47(c)(1). However, notwithstanding this governmental refusal to participate in emergency planning for Seabrook Station, the Board finds that the SPMC provides reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at Seabrook Station.

MAG 1.16.A-1.16.A.2. FEMA's review of a utility-sponsored offsite emergency plan is within its authority, as set forth in 44 C.F.R. § 350.3. FEMA possesses the inherent authority to review all offsite emergency plans at the request of the NRC, as indicated in FEMA's rules, consistent with each of the NRC's Authorization Acts since 1980 (e.g., NRC Authorization Act of 1980, Pub. L. No. 96-295, § 109(b)(1)(B)), and with the Memorandum of Understanding entered into by FEMA and the NRC, 50 Fed. Reg. 15485 (April 18, 1985). There is no valid basis for asserting, as does

the Mass AG, that FEMA's review of utility-sponsored emergency plans is ultra vires, nor could FEMA's own 1989 rule change confer authority upon FEMA which it did not already have. Further, as the Commission has previously stated in this proceeding, FEMA's findings and determinations as to the adequacy and implementability of a utility plan are to be accorded the same weight, i.e., a rebuttable presumption, as is accorded to its views on the adequacy and implementability of State and local emergency plans. Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), CLI-89-8, 29 NRC 399, 417-18 (May 18, 1989). See also, Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-903, 28 NRC 499, 507 (1988).

MAG 1.16.B.1-1.16.B.2. FEMA's review of the SPMC evaluated the adequacy and implementability of that plan in Mode 2, which assumes that the Commonwealth will delegate authority to the NHY ORO to implement the SPMC. The Commonwealth has not made any showing that it will not delegate such authority, apart from its unsuccessful argument that such a delegation would be unlawful. See Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), LBP-89-8, 29 NRC 193 (1989). Moreover, the Commonwealth indicated that it would not even attempt to demonstrate in this proceeding what it would or would not do in the event of a radiological emergency at Seabrook Station. Tr. 15081-82; Tr. 15354; Tr. 15367; Tr. 15390-93; Tr. 15431. In addition, the Commonwealth indicated that it was prepared for the Board to presume that the Commonwealth would make a "workmanlike" best efforts response with the personnel and resources available to it, Tr. 15319, Tr. 15487-88, Tr. 15508-09, and that it would follow the utility plan (if that plan were found to be adequate

and implementable). Tr. 15081-82; Tr. 15401-02. Thus, there is no reason to question FEMA's determination to review the SPMC in Mode 2. Moreover, FEMA's review of the plan in Mode 2 was necessitated by the refusal of the Commonwealth and Massachusetts towns to participate in emergency planning; for this reason FEMA could not and did not evaluate those governments' resources or abilities to implement the SPMC. However, while FEMA's ultimate findings of adequacy and implementability directly pertained to implementation of the SPMC in Mode 2, its findings were not limited to that Mode. Tr. 22384, Tr. 22389. Thus, once FEMA determined that the SPMC was adequate and implementable as a "stand-alone" plan under Mode 2, with only the ORO's resources, it could logically assume that the plan could certainly be implemented with the combined resources of the ORO and the Commonwealth.

MAG 1.18-1.18.B.1. Contrary to MAG's assertion, FEMA did not utilize a "best efforts" standard in evaluating the adequacy of the SPMC. See Tr. 18502; and compare MAG 1.18.A with Tr. 18096, Tr. 18100-03, Tr. 18106-08. Nor does MAG accurately characterize statements in this regard made by FEMA's counsel. Compare MAG 1.18.A with Tr. 18874. FEMA's evaluation was based upon appropriate standards, as set forth in NUREG-0654 and Supp. 1 thereto. It should be noted, too, that the various FEMA guidance memoranda which have been published suggest alternative means of satisfying the planning standards, but do not, in and of themselves, establish standards or regulatory requirements. See, e.g., Tr. 18100, Tr. 18104, Tr. 18149-55, Tr. 18815-22.

MAG 1.18.B.3. There is no significance to the fact that FEMA utilized different guidance in the 1988 exercise than was utilized in the

1986 Seabrook exercise. See Tr. 22248-50. In this regard, FEMA witness Donovan testified that in 1988, FEMA promulgated a new exercise evaluation methodology (EEM), different from the methodology which was in place when the 1986 exercise was conducted and, in that sense, the evaluation guidance was different for the two exercises. Tr. 22249. However, in essence, FEMA evaluated response adequacy in 1986 by facility, whereas in 1988, it evaluated response adequacy by exercise objectives for entire principal response organizations. Id. In this regard, it should be noted that the 1988 EEM were developed in order to provide greater consistency in FEMA's exercise evaluations. See MAG Ex. 99 at 2-3. There is no merit in MAG's assertion that FEMA's 1988 Seabrook exercise evaluation is marred by a vague or arbitrary evaluation process.

MAG 1.18.C.-1.18.C.2. Contrary to MAG's assertion, FEMA's treatment of reception center staffing for New Hampshire does not demonstrate a flaw in FEMA's evaluation process. At the time of the 1988 exercise, FEMA had identified the lack of 24-hour staffing as a planning inadequacy and obtained the agreement of the State of New Hampshire to amend its plan to provide for 24-hour staffing at these locations. Tr. 22015-16; App. 43F, p. 200. However, because at the time of the exercise the New Hampshire plan did not call for 24-hour staffing at the reception centers and staging areas, the Extent of Play agreements did not call for New Hampshire to demonstrate 24-hour staffing at those locations. Tr. 22022. FEMA did, however, require New Hampshire to demonstrate the process it would utilize to effect a shift change of supervisors at these locations and to seek assistance through the New England Compact to request additional personnel. The Extent of Play called for New Hampshire to

demonstrate 24-hour staffing and shift changes at other locations, including the EOC, and the State successfully demonstrated such capabilities. App. Ex. 43f, pp. 198-99. Under the circumstances, given New Hampshire's commitment to revise the plan and its successful demonstration of 24-hour staffing and shift changes at other locations, FEMA appropriately found that New Hampshire had satisfactorily demonstrated its ability to maintain staffing on a continuous 24-hour basis. Id. Mr. Donovan's evaluation of New Hampshire at the 1988 Seabrook Exercise and his evaluation of the State of Oregon at the 1987 Trojan exercise are not fundamentally inconsistent, given the differences between the two States' respective emergency plans and the agreed upon Extent of Play for each of the two exercises. See Tr. 22015-23.

MAG 1.19. The Mass AG contends that Mr. Donovan's actions in discarding notes and drafts of his exercise report undermines the weight which should be accorded FEMA's views. The Board does not accept this assertion, for the reasons set forth in Staff Finding 11.1.6. Further, the Board notes that the Intervenors were afforded ample opportunity to discover the bases for FEMA's final exercise report -- with full cooperation from FEMA -- by various means, including depositions of individual evaluators. Also, the Intervenors had ample opportunity to check the accuracy of the facts reported by FEMA, having been permitted to observe the exercise and to review the players' logs which were made available to them. Intervenors have provided no basis for the Board to disregard the Commission's determination by rulemaking that FEMA's views are to be accorded a rebuttable presumption in NRC licensing proceedings.

2. EVACUATION TIME ESTIMATES

MAG 2.1.14.K-2.1.14.M. The Mass AG incorrectly states that the SPMC's ETEs for Regions 8 and 13 reflect ETEs for New Hampshire communities rather than for Massachusetts communities located within the EPZ, citing Tr. 26706-07. In fact, the ETEs presented are for the entire region under study, including both Massachusetts and New Hampshire areas, based upon their proximity to Seabrook Station. This approach is consistent with NUREG-0654 and is acceptable, given (1) the reality that traffic flowing through these areas cannot be segregated based upon political boundary lines, Tr. 26716; (2) the fact that New Hampshire coastal areas are closer to the plant than are the Massachusetts communities and will be generating sizeable traffic flows before or as soon as an OTE is issued in Massachusetts, Tr. 28232-33, Tr. 28237-38; and (3) NUREG-0654 calls for integrated emergency planning between contiguous political jurisdictions. NUREG-0654 at 19, 23-24. See also Staff Finding 2.1.43.

MAG 2.1.14.S. Contrary to the Mass AG's representation, Dr. Urbanik did not state that "ETEs should generally be accurate within about 10%." In fact, the accuracy referred to by Dr. Urbanik was "in the neighborhood of 10%," which, in any event, he indicated is merely an optimal goal. Tr. 7460. Further, he testified that the appropriate standard for evaluating the accuracy of an ETE is whether it provides a reasonable estimate of anticipated evacuation times, recognizing (1) that great uncertainties are involved and (2) that the times provided are only estimates, the proper use of which requires a large degree of interpretation. Tr. 7460-61; Tr. 7462-63. The Board has already determined that evacuation time estimates

should provide reasonable estimates of the times required to evacuate various sectors of the EPZ, and that they should afford realistic appraisals of anticipated evacuation times. See PID ¶¶ 9.3 and 9.4, 28 NRC at 776-77. Given the large uncertainties inherent in any ETE, we find no need to require accuracy to any particular quantitative degree.

MAG 2.1.15.F - 2.1.15.L. The Mass AG contends that a higher percentage (30%) of beach vehicles should be assumed to be distributed in Salisbury Beach, with an additional 10% on Plum Island, based on the assertion that similar percentages were observed in Intervenor's aerial photographs. In contrast, the Applicants utilized a distribution in which 20.4% of beach area vehicles were assumed to be in Salisbury Beach with another 10.4% assumed to be on Plum Island, based on the actual distributions observed in their aerial photographs, Tr. 2411-12; no party has contested the accuracy of Applicants' use of these data. While the Mass AG asserts that certain other photographs reflect a higher percentage of vehicles in Salisbury Beach, it is undisputed that the distribution of beach vehicles varies from day to day and from hour to hour, Tr. 27996-28000, Tr. 28004, Tr. 26824, so that no one percentage may be relied upon as accurate at the time of an actual emergency. Moreover, the Mass AG's insistence that 30% of beach area vehicles should be assumed to be located in Salisbury Beach is inconsistent with various (lower) percentages of vehicle distribution which were observed in his own aerial photographs -- which data were disregarded by MAG witnesses. See Tr. 27996-28004. Further, as indicated in our prior PID, we relied upon the Applicants' aerial photographs in estimating the number of vehicles which may be anticipated to be present in Seabrook beach areas on peak summer

days. PID ¶¶ 9.102, 9.108. It would be illogical to utilize the Applicants' photographs, as we have done, to estimate the total number of vehicles which may be anticipated to be present, while at the same time disregarding the vehicle distribution data reflected in those same photographs. Tr. 26816; see also Tr. 26817-22. The Board finds no error in Applicants' use of their aerial photographs to estimate the beach vehicle distribution.

MAG 2.1.20.D - 2.1.20.I. The Mass AG's proposed findings concerning the turn percentages utilized at the intersection of I-95 and Route 110 (TCP B-AM-06) are puzzling at best. MAG seems to argue that both Route 110 and I-95 will be free-flowing at that juncture, and that the on-ramps to I-95 will involve congestion of no more than a minute -- although he also contends that evacuees will have spent a long time in congested traffic on Route 110 leading up to that point. See MAG PFF 2.1.20.G - 2.1.20.H; MAG PFF 3.1.31.A. MAG's findings in this regard are unsupported by any reliable evidence, nor has he provided any reason for us to abandon our prior determination that evacuees will generally follow the route which allows them to leave the area at risk as rapidly as possible. Tr. 26744-45. See also Tr. 16979, Tr. 16987-90, Tr. 17105-06.

MAG 2.1.23.A - 2.1.23.J. The Mass AG has failed to demonstrate that a real-time beach population monitoring system should be required to be instituted in beach areas. See Staff Finding 2.1.12. No ETE can be expected to anticipate entirely the conditions likely to be present on a given day. For instance, adverse winter weather scenarios may vary widely, from light snow to heavy snow, to sleet and ice -- and indeed, these different conditions may all be present in different localized

areas of the EPZ at the same time -- resulting in capacity reductions that will vary widely. The same is true with respect to innumerable variables which may affect an ETE on a given day, such as the location of traffic accidents, road construction, traffic signal outages, etc., all of which will cause actual evacuation times to vary from the predicted ETEs. The Board finds no need for an infinite array of ETEs or a real-time monitoring system to account for fluctuations in the size and distribution of beach populations, just as there is no need to account for the infinite array of variables which may affect an ETE at any given time.

MAG 2.1.23.D. The Mass AG asserts that Mr. Callendrello would use the same ETE (scenario 1) at 4 a.m. on the July Fourth weekend as he would at 2 p.m. on July 4th, citing Tr. 27076 (MAG PFF at 92). Apart from the fact that the transcript citation provided by Mass AG does not support this assertion, what Mr. Callendrello indicated was that decision-makers would use the ETE for the scenario which most resembled the situation at hand, adjusting it as appropriate upon consideration of relevant factors, such as by deducting for day-trippers who would not be present. Tr. 27075-76, Tr. 27078-81; see also Tr. 27164-65. While the Mass AG now questions Mr. Callendrello's judgment as to which scenario most closely resembles the situation hypothesized, he altogether failed to explore that judgment on cross-examination and we have no basis, on this record, for finding fault with his testimony. Further, even if Mr. Callendrello identified an incorrect scenario as most closely resembling the hypothesized situation, such an error would not detract from the overall soundness of his approach.

MAG 2.1.36.S. There is no evidentiary basis for the Mass AG's assertion, citing Tr. 28149, that Mr. Lieberman reduced the capacity factor by 5 percent in order to compensate for a 5 percent increase in ETEs caused by returning commuters. Compare MAG PFF 2.1.36.S with Tr. 28149.

### 3. TRAFFIC MANAGEMENT PLANS

MAG 3.1.22. The Board has previously found Dr. Mileti to have sufficient expertise to testify as to expected driver behavior in an evacuation. PID ¶¶ 7.84, 9.18. See also Tr. 6316, Tr. 9431-33.

MAG 3.1.31 - 3.1.31.1.A. Despite the Mass AG's insistence that Mr. Lieberman should have considered a proposed traffic routing scheme whereby Beach Road traffic is routed to 2 lanes west on Route 110 and 1 lane south on Route 1, the Board is satisfied with Mr. Lieberman's explanation that such a plan would not decrease evacuation times. As Mr. Lieberman explained, (1) the feeder route, Beach Road, would not impart sufficient traffic volume to maintain those routes at capacity, and (2) such a plan would cause imbalances and potential disruptions to the evacuation traffic flow. See Tr. 17622-25.

MAG 3.1.31.G. The Mass AG argues that no evacuees will travel west on Route 110 to I-495, past the I-95 interchange, on the assumption that they all will have been instructed to proceed to the Beverly reception center, and that they will all comply with that instruction. This theory simply defies common sense. As we noted previously, the evacuees' main concern will be to distance themselves from the source of risk as quickly as possible. Further, it should be noted that (1) there is no evidence

that all evacuees, and particularly day trippers without access to route maps and other pre-emergency information, will be instructed as to which specific routes to utilize in going to the Beverly reception center, (2) it is unlikely that all of them will go to the Beverly reception center, and (3) even if they all received instructions to proceed to the Beverly center and to use certain routes in going there, we find no reason to believe they would follow those route instructions rather than be guided by their fundamental objective of escaping from the area at risk as quickly as possible. In sum, the Board finds that IDYNEV's assignment of a portion of the evacuating traffic to proceed west on Route 110 is not unreasonable.

#### 4. EVACUATION OF TRANSIT DEPENDENT PERSONS

TON 4.1.2(1). TON ignores the results of FEMA's review and evaluation of the SPMC. App. Ex. 43C at 60-65. Further, TON fails to provide any record support for its views regarding verification of resources and routes and proper identification of the transit dependent population.

TOWN 4.1.3.WN.f. It is noted that Mr. Knowles has no training in emergency planning or traffic management, and his experience in traffic management is limited to rerouting traffic around road hazards. Tr. 16647.

TON 4.1.5(g)(1). TON ignores the fact that the buses will have route guides to guide the drivers. SPMC Section 2.1.1 at 2.1-27, IP 2.10 and IP 2.11. See also MAG PFF 5.1.6.E. Further, buses leaving from the

transfer point to the reception center will have maps of the Town of Newbury and of applicable regions of the EPZ. Tr. 17402.

TOWN 4.1.12.WN.a. Applicant panel members reviewed the written report of the field study which documented field verification of the evacuation bus routes and provided details concerning both roadway characteristics and the capability of buses to perform all turn movements. App. Reb. No. 9 ff. Tr. 17333 at 59-60. In addition, every town bus route was personally driven and surveyed by Applicant witnesses Baldacci and Lieberman. Tr. 17384, Tr. 17419-20.

TOWN 4.1.18. Based on the applicable flood maps, 100-year and 500-year flood plain intervals, the Board finds it highly improbable that a major flood will cause the roadways in question to become impassable at the same time that an accident occurs at Seabrook Station. No additional detail in the SPMC is necessary to deal with this contingency. See App. Reb. No. 9 ff. Tr. 17333 at 69.

##### 5. PERSONNEL AND TRAINING

MAG 5.1.6.A. The Mass AG mislabels evacuation support-related positions as "emergency-specific positions," and he improperly adds road crews, ambulance/van drivers and bus drivers to the category of positions requiring more than a single shift of personnel. The Mass Ag ignores the fact that no more than a single shift for evacuation support-related positions is required since these functions will be performed over a relatively short period of time -- in contrast to the positions required to be staffed during the entire emergency, which may last for a protracted period. SPMC 2.1-1.

MAG 5.1.6.B. - 5.1.6.C. FEMA witness Donovan testified that some positions would not be required to be staffed after certain protective actions (such as evacuation) had been implemented. See MAG Ex. 65 at 3; Tr. 18695. FEMA also determined that the requirement for second shift staffing is satisfied by the SPMC's provisions for calling on the Yankee Atomic Mutual Assistance Plan. With respect to shift changes, the SPMC calls for the first shift to brief the second shift concerning the existing situation and procedures to be followed. See App. Ex. 42 at 2.1.1, IP 2.11, IP 2.17, IP 3.2, IP 3.5, IP 2.9; App. J. The process of effecting a shift change, without physically demonstrating it, was reviewed during the exercise and found to be adequate. Tr. 21718-19.

MAG 5.1.15.A. Dr. Harris relies completely on a training design document to determine whether there are linkages between the training module and the exercise. Although Dr. Harris has never participated in a major FEMA exercise or a drill and does not know what aspects of the training program were exercised, Tr. 26204-05. Thus he has no basis to testify whether his desired linkages took place or, for that matter, whether or not the tasks had been learned. Dr. Harris was not aware of FEMA witness Donovan's statement that he had never seen an exercise with a perfect score, although he did not challenge that as unreasonable. Tr. 26203; See Tr. 22671.

MAG 5.1.17 - 5.1.17.A. Dr. Harris conceded that he did not know whether NUREG-0654 suggests that FEMA should review the design of training plans. Tr. 26206. Dr. Harris' review was mainly focused on program design rather than constituting a thorough review of instruction materials and guidance for tabletops, walk-throughs and drills -- although he

admitted that these were, by design, appropriate verbal learning methods. Tr. 26214-16.

MAG 5.1.20.A. Dr. Harris's review of the Seabrook materials was narrowly limited to the design of the training, and was superficial and incomplete in that he did not review the quality of instruction, the content of the training or its verification through testing or the exercise. Tr. 26209-21.

MAG 5.1.21.B. There is no evidentiary support for MAG's criticism of the instructor evaluation forms. On the contrary, the record reflects that student feedback has proven a very effective process for improving both the training program and the overall program for emergency response. Tr. 27521-22.

MAG 5.1.22.C - 5.1.22.D. Dr. Adler had no sound basis for his testimony concerning the traffic guides' abilities. Further, he was not present at the traffic guides' training sessions and drills conducted prior to the exercise. Tr. 26278-80.

MAG 5.1.22.B - 5.1.22.E. Dr. Adler agreed that the competence and experience of the instructors are important factors in training, and that he did not know anything about the competence of the instructors here. Tr. 26307-08. He further agreed that it would be useful if a considerable portion of the traffic guides had previous experience in directing traffic, Tr. 26308, which is the case here. See App Reb. 20 ff. Tr. 27388, at 31.

MAG 5.1.22.D. Instructions in the ORO's training materials describe the information which traffic guides are to provide. See, e.g., Tr. 26274-75; see also Tr. 17439.

MAG 5.1.24.A - 5.1.24.B. Traffic guides are instructed to keep traffic moving, and are to assess waiting times and traffic backups in each direction. Tr. 27444; Tr. 27450-51.

MAG 5.1.28.A - 5.1.28.B. The training for PAR decisionmakers is broader than that suggested by Dr. Goble -- who, it should be noted, never attended a training session. Tr. 24310.

MAG 5.1.28.C. Dr. Goble, admittedly, is not qualified to testify on human behavior. See, e.g., Tr. 24172-73, Tr. 24221.

## 6. PAR GENERATION

MAG 6.1.8.A. As discussed above, FEMA's findings will be afforded a rebuttable presumption in this proceeding. FEMA's review of the SPMC found that sheltering as a protective action has been considered as a viable option for the Seabrook site. Tr. 18573-74. FEMA pointed out that the .9 dose reduction factor utilized in the SPMC is conservative since some houses in the area have no basements. Tr. 18584-85; see also the discussion infra at paragraphs 6.1.61.C and 6.1.61.D.1-6.1.61.D.2.

Mass AG's proposed finding 6.1.8.A. incorrectly characterizes the record in stating that once a site is approved, FEMA assumes that any inherent limitations for adequate emergency planning at the site "can not preclude a finding that emergency planning is adequate." In fact, in response to the AG's question, FEMA witness Donovan stated only that "it would be possible to come up with a reasonable assurance finding", not that such a result is mandated. Tr. 18501. Further, the Mass AG's related proposed finding, as to FEMA's asserted failure to review the SPMC properly, is not supported by the record. Contrary to the Mass AG's suggestion, here Mr. Donovan stated that FEMA does not review plans --

i.e., any plan, not just the SPMC -- in the context of whether dose savings are maximized but, rather, in terms of whether the criteria in NUREG-065A have been satisfied. See Tr. 18573-75. There is nothing inappropriate in this aspect of FEMA's review process.

MAG 6.1.36. Contrary to the Mass AG's suggestion, Staff witness Bores stated that when the onsite organization makes a recommendation, it becomes incumbent upon the State to weigh that recommendation rather heavily; accordingly, he believed it would be inappropriate for the onsite organization to make a beach closure recommendation at the alert stage of an emergency, when the State would want to consider and weigh all of the options available to it. Tr. 24709-10.

MAG 6.1.53. The Mass AG asserts that the exercise revealed a need for separate PARs to be available for Salisbury, because of coastal meteorology and the large Salisbury beach population. There is no evidentiary support for this proposed finding other than Dr. Goble's admitted "second guessing" and his use of hindsight concerning shifts in wind direction. See Tr. 24512-19. See also Staff Finding 6.1.55.

MAG 6.1.59.A. See Staff Finding 2.1.43.

MAG 6.1.61.A.1 - 6.1.61.A.2. The Mass AG asserts that the onsite and offsite plans are inconsistent as to the timing and implementation of beach closing recommendations. Essentially, the Mass AG asserts, based on MAG Ex. 112 (IP 2.5), that it is unclear whether a beach closing at the SAE stage is discretionary or automatic, and that the onsite beach closing recommendation was not in accordance with the onsite plan and procedures. Thus, Mass AG speculates, if the onsite plan was followed, and the EOF did not recommend beach closing at the SAE stage, the onsite and offsite

plans would have resulted in dissynchronous beach closing recommendations. This assertion is incorrect. IP 2.5 indicates that Massachusetts beach closing at the SAE stage is a consideration, not an automatic requirement. See Tr. 24753. While plant conditions are the primary consideration, other offsite considerations, such as weather, the time of day and the season, would also be taken into account in making this recommendation. Tr. 24754; see also App. Ex. 43C at 52-53. The onsite organization's beach closing recommendation was not inconsistent with the onsite plan and procedures.

MAG 6.1.61.B. The Mass AG asserts that alternatives to evacuation have not been made available to the Massachusetts beach populations, since there assertedly has been no effort to explore a sheltering alternative for this population. The Mass AG, however, provided no evidentiary support for this proposition. Moreover, FEMA witness Donovan testified that sheltering has been given consideration as a viable option in the SPMC. Tr. 18574-75; see also App. Ex. 43C at 69-70.

MAG 6.1.61.C. The Mass AG asserts that the use of a .9 dose reduction factor is inappropriate, since it underestimates the sheltering capacity available to permanent residents in the Massachusetts portion of the EPZ. However, as Staff witness Dr. Bores pointed out, it is not practical to tailor PARs based on shelter protection factors for each dwelling or each individual family in the area. Rather, decisionmakers must look to see what shelters are generally available and utilize a dose reduction factor based on the protection afforded by those structures. Tr. 24919-21. In doing so, it is appropriate to give particular consideration to the most vulnerable portions of the population; while

this may result in the selection of a drf that is somewhat conservative, this is still appropriate. Tr. 24919-21; see also Tr. 18578.

MAG 6.1.61.D - 6.1.61.D.4. The Mass AG finds a fundamental flaw in the SPMC's consideration of shelter, asserting that (1) sheltering is underutilized, (2) meteorological data is not effectively and timely integrated into PAR decision-making, and (3) METPAC has inherent defects; further, he asserts that this flaw was revealed in the exercise in connection with the PARs issued for Newburyport and that, for this reason, Massachusetts officials would decline to utilize the plan. However, we cannot find that sheltering is underutilized in the SPMC based on its selection of a .9 drf. In this regard, FEMA found that the .9 drf is an appropriate factor upon consideration of the housing stock available in Massachusetts portions of the EPZ. FEMA witness Donovan testified that .9 is a conservative number, in view of the less substantial shelters available in beach areas, and indicated that it would be wrong to select a dose reduction factor which assumes that greater protection is available. Tr. 18577-78. While this may result in some underutilization of available sheltering in protective action decisionmaking, it would be inappropriate to do otherwise. Protective action decisions must be based on dose projections for the public in general, and not on dose projections for the occupants of various individual buildings. Tr. 18578; Tr. 24919.

MAG 6.1.61.D.3. The evacuation of CON was recommended because there was no indication that plant conditions were being stabilized, and it therefore appeared that the release would continue for an indefinite period of time. Tr. 24817. A default value of 8 hours was chosen because it gave an upper bound as to the doses that could be expected if

wind direction and release rates continued to be the same. Tr. 24885. At the time the determination was made to evacuate CON, the release had already gone on for two hours and all available information indicated it was not under control; it was more realistic to assume the release would continue for 8 hours, rather than 2 hours, given the fact that there was no known hardware fix at the time and exercise participants could not have known that the release would be under control in two hours. Tr. 24893-94; Tr.24888-90. Further, at the time the order to evacuate CON was given, the wind had not yet shifted to Newburyport, and thus the assumption that people would be able to leave the area before the plume arrived was not unreasonable. Tr. 24900.

MAG 6.1.61.D.4. There is no evidentiary support for the Mass AG's characterizations of Dr. Bores' testimony or of the stipulation which was bound into the transcript. Compare MAG PFF 6.1.61.D.4 with Tr. 24901 and Stipulation ff. Tr. 28286.

#### 7. COMMUNICATIONS/NOTIFICATION

MAG 7.1.18.B. The Mass AG asserts that route guides and bus drivers will not be able to receive or transmit vital information that may be needed until the buses are 15-20 miles from the town. No evidentiary support is provided for this assertion, nor does the Mass AG explain what is meant by "vital information" or why earlier communications are necessary.

MAG 7.1.18.H. The Mass AG here asserts that the Applicants have made only one change in connection with radio range issues (i.e., the procedure for transmitting the directive to ingest KI), which he asserts disregards the fact that FEMA identified four ARCA's to correct problems observed in

this area during the exercise. However, the Mass AG disregards the status of corrective actions, which show that FEMA's recommendations have in fact been implemented. App. Ex. 43E at 15-17.

MAG 7.1.19.B. The Mass AG asserts that the Department of Justice considers an acceptable access time for public safety communication systems to be 2.5 seconds in 90% of access attempts. However, during cross examination it was established that this "standard" was directed to trunk line requirements for incoming communications to police stations, rather than for radio communications among field operatives. Tr. 26059-60. It should also be noted that the Applicants have now added a fifth ERN channel. Tr. 27257-58; Tr. 27272.

MAG 7.1.21. While the Mass AG complains that the Applicants only recently decided not to implement a roll call procedure, the timing of this decision is irrelevant since emergency plans should be expected to evolve continually. See, e.g., Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2), ALAB-819, 22 NRC 681 (1985).

MAG 7.1.49.A. While the Mass AG asserts that Applicants have disregarded FEMA's recommendations to improve training, this assertion ignores the status of corrective actions. See App. Ex. 43E at 15.

MAG 7.1.58.G. Contrary to the Mass AG's suggestion, it would be inappropriate to require that emergency messages include information pertaining to release severity and potential health effects. App. Reb. 19, ff. Tr. 27483 at 33.

MAG 7.1.61.C - 7.1.61.N.

1. Despite the Mass AG's insistence to the contrary (see also MAG proposed finding 1.18.B), the Board accepts FEMA's judgment in its

exercise report, App. Ex. 43F, as to the adequacy of the EBS messages concerning Amesbury and Salisbury schools. Mr. Donovan explained the context in which the EBS messages at issue were broadcast, as having been part of the exercise scenario designed to test the ORO's ability to implement the SPMC in a worst-case situation with no assistance from the Commonwealth of Massachusetts. Earlier in the exercise day, the FEMA Control Cell simulating Massachusetts officials had refused to approve the ORO's request to approve a precautionary evacuation or deferred dismissal of schools. Tr. 22468. After the Massachusetts Governor (simulated by the Control Cell) recommended evacuation of Amesbury and Salisbury at 2:04 p.m., the ORO decision-makers assumed that State officials would permit the regular school buses to be used to evacuate school children to the reception centers because the recommendation to evacuate was issued shortly before regular school dismissal time, when the regular school buses would already be waiting at the schools to pick up the children and transport them to their homes. Tr. 22469. Mr. Donovan, however, instructed the FEMA Control Cell simulating the Massachusetts officials to deny authorization to use the school buses to evacuate the school children, thus requiring the ORO to mobilize its own bus resources to evacuate the Amesbury and Salisbury schools. Tr. 22469-70. It was in this context that the ORO, within ten minutes, drafted and broadcast EBS Message #3, stating that the Governor had recommended the evacuation of Amesbury and Salisbury, and informed parents with children in Salisbury and Amesbury schools that the children "are safely maintained at school, where they will be kept until they can be safely moved." Tr. 22469; App. Ex. 43F at 82- 83.

2. Mr. Donovan disagreed with the Mass AG's assertion that this EBS message was inaccurate or that it indicated school children were being evacuated and sheltered at the same time. Although Mr. Donovan thought that the language of the message "lacked clarity" and might be confusing to some members of the public, he emphasized that "a discerning parent would have heard that the children are going to be evacuated and that they are being kept at school until they can be evacuated." Tr. 22467-68. Mr. Donovan (who was at the EOC when this message was approved for broadcast, Tr. 22464) then directed simulated members of the public to call in, stating that they were confused by the message and asking for clarification as to whether the schools were being evacuated or sheltered; this was done so as to further test the ORO's capabilities to disseminate public information. Tr. 22466. Also, following the release of EBS Message #3, the NHY ORO conducted a press briefing at which the message was discussed with members of the press, where it was pointed out that the ORO was in the process of getting buses to the schools in order to effect the children's evacuation. Tr. 22476, Tr. 22495-96.

4. The subsequent EBS Message #4, which was broadcast at 3:32 p.m., specifically stated that all schools within the evacuation areas were being evacuated to designated reception areas, and that children being held at school would be kept there until they could be moved safely. App. Ex. 43F, at 84-85. Mr. Donovan testified that because this message specifically stated that school children were being moved to reception centers, he did not find the same problem of lack of clarity that he found with the prior EBS Message #3. Tr. 22480.

5. FEMA determined that the lack of clarity in EBS Message #3 should be classified as an ARCA rather than a deficiency, in the context of the total system that provided information to the public. FEMA took into account the discussion of the provisions for transporting school children that took place at the press conference simultaneous with the broadcast of the message, as well as the accurate information conveyed by the Joint Telephone Information Center to callers who requested clarification, and the fact that the message itself accurately stated that the children were being held in school until the ORO could position the resources there to evacuate them. Tr. 22476-77. Upon consideration of all these circumstances, FEMA determined that the public would have been accurately informed of the status of the schools, and that the public health and safety was therefore not adversely affected; an ARCA was therefore determined to be the appropriate classification. Tr. 22477.

6. The Board finds that the ORO's implementation of the SPMC's rumor control system was an effective counterbalance to the whatever minimal confusion might have been caused by EBS Message #3. Mr. Donovan's explanation of FEMA's reasoning and thought process concerning the school EBS messages is convincing and is supported by reliable evidence, and we find no impropriety in FEMA's treatment of this matter.

8. PROTECTIVE ACTIONS FOR PARTICULAR POPULATIONS

MAG 8.1.4.1.G - 8.1.4.1.V. Given the reluctance of disabled persons to identify themselves, it is possible that the Applicants have not listed every individual member of the special population groups within the Seabrook EPZ. Such a standard, however, would be impossible to attain and is therefore not appropriate. For example, Mass AG witness Guy Daines

stated that efforts in his county to identify special needs populations over a period of eight to nine years yielded a list on which far less than all of the special needs individuals was identified. Daines Dir., ff. Tr. 19515 at 7; Tr. 19539-40. Mr. Daines attributes this difficulty in identifying the special needs population to the reluctance of those individuals to let others know they are disabled.

If, in fact, the Applicants' special needs survey identified fewer special needs residents than might be expected, that circumstance may be due in part to the fact that it was not designed to identify everyone with some impairment; rather, it was intended to identify only those individuals who, in their judgment or the judgment of their guardians, could not readily get help from friends, neighbors, relatives, or other care-givers. Even assuming that additional special needs individuals exist and that the Applicants have not dedicated sufficient resources to assist them, it is unlikely that those persons would not receive the benefit of the SPMC's protective actions. Both empirical evidence and established theory in disaster research establish that people become concerned about the safety of others in an emergency, resulting in a dramatic increase in helping behavior. Consequently, we would expect such individuals to be assisted by their neighbors, friends and relatives. App. Reb. No. 6, ff. Tr. 21049 at 46-48.

MAG 8.1.13.A -8.1.13.S. Mr. Sikich's credibility was severely impaired on cross-examination. See Staff Findings 8.1.15 - 8.1.26.

MAG 8.1.28.A - 8.1.28.C. Even if an early beach closing at the alert level is recommended, the Mass AG has provided no probative evidence to support his conclusion that area residents will call the special

facilities in such large numbers that the special facility liaisons will be unable to get through. As for Mr. Sikich's testimony that people with children in school will tie up the lines into the schools and special facilities, on cross examination he admitted that he had no knowledge whatsoever about the number of phone lines available at any given facility, other than observing the telephone numbers listed in Appendix M. Tr. 20696.

MAG 8.1.34. Ms. Moriearty's testimony only addresses those factors which she feels should be considered in the planning process; she is not qualified to testify what FEMA believes should be considered.

MAG 8.1.34.H - 8.1.34.M. Under the plan, adequate provisions for physical assistance of special needs individuals have been made. The evacuation bed buses which are to be sent to special facilities will be operated by a driver trained to utilize the equipment. At each special facility, the facility's staff will assist the driver in loading the vehicle. Where more than one bus unit is assigned, drivers from other units will be available to assist in loading. When only one unit is assigned, ORO personnel will be assigned to ensure adequate capability to load the bus. For evacuation bed buses assigned to pick up impaired homebound individuals, ORO personnel will be assigned to assist the driver. App. Reb. No. 6, ff. Tr. 21049 at 23. The individuals assigned to vehicles for the purpose of providing physical assistance will be taken from the ORO route guide pool. Tr. 21065-66.

No specialized training is provided to the drivers of wheelchair vans or ambulances because they perform these tasks by occupation and are therefore qualified to provide whatever assistance may be necessary.

Tr. 21068-69. Bed bus drivers are afforded emergency response training, evacuation bed training, emergency medical service training, basic first aid, CPR and patient lifting techniques training. Tr. 21070-71. The same training is provided to some route guides. Tr. 21072. As for other drivers, no specialized training is necessary because these drivers will not be assigned to pick up individuals who require assistance beyond that which the drivers provide on a regular basis. Tr. 21069.

MAG 8.1.34.N - 8.1.34.T. The SPMC provides adequate assistance for sheltering disabled persons through the use of knowledgeable contact personnel. See MAG Ex. 71, passim. Specifically, the special population liaisons who are responsible for contacting special needs individuals are available to provide assistance over the phone or by dispatching a route guide. Tr. 21077-78.

MAG 8.1.46.A. In defining the types of vehicles needed according to the classification of patients in each facility, the applicants were aware that Level 1 and Level 2 Medicare and Medicaid definitions do not directly correspond to the level of required patient care. Rather, they recognized that patients are classified by the level of nursing care required, and they used this classification only as a way of determining a planning basis default value. Tr. 21373-74. This technique, if anything, is premised upon a conservative assumption about the degree of assistance required, Tr. 21377, and is acceptable.

MAG 8.1.50 - 8.1.52. Although the Applicants' list of day care facilities was somewhat outdated, this problem was cured by their stipulation to update the data on a quarterly basis in the future. Tr. 21637-43.

MAG 8.1.57.B.1. Applicants have not designated any ambulances to pick up special needs residents in the EPZ because no persons requiring that level of care have yet been identified. Tr. 21072. The Mass AG's implication that individuals who were initially found to require transportation by ambulance have now been reassigned to bed buses has no evidentiary support. See Tr. 21074-75.

SAPL 8.1.62.b. Should the administrator of a special facility need advice in order to determine whether to evacuate or shelter, he or she can obtain it from a person trained in health physics at the EOC. Tr. 21547-48. The fact that special facility administrators are not provided with dose reduction factors in anticipation of an emergency would not significantly impair their ability to make that decision, since a trained health physicist could quickly calculate a dose reduction factor at the time of an emergency based upon a simple description of the building's construction. Tr. 21549.

MAG 8.1.63.A. Although the Applicants performed an assessment of sheltering factors for the nursing homes located in New Hampshire, at the request of New Hampshire officials, Tr. 21417, they did not do so for nursing homes located in Massachusetts. However, a trained health physicist at the EOC could quickly calculate a dose reduction factor for these facilities at the time of an emergency based upon a description of the building's construction. Tr. 21549. This technique would have little effect on the accuracy or precision of the determination. Tr. 21549.

MAG 8.1.63.C -8.1.63F. As for the supporting evacuation and sheltering plans for special facilities, the Applicants utilized techniques that are generic within the industry, in order to support

procedures which already exist within the institutions. Tr. 21219-20. Accordingly, those institutions would have no difficulty implementing the plan even without having conducted specific training. Moreover, the absence of hazard-specific training would not significantly impede the effectiveness or the efficiency of the evacuation. Tr. 21222-23. Accordingly, there is no need to develop separate ETEs for facilities which have not yet received training from the Applicants.

MAG 8.1.66.A - 8.1.66.B. The Applicants' planning basis, which provides for one teacher to accompany school children on each bus, is adequate. Should the teacher require assistance in taking care of the children, such assistance can be provided by the older school children. Tr. 21323.

MAG 8.1.66.C. The Board finds no reason to impose a requirement that the Applicants develop specific formal procedures for reuniting transit dependent families with their school children after the EPZ has been evacuated.

MAG 8.1.67.A. - 8.1.68.A. Drivers of vans and buses need not be afforded special training in loading people since they will not be sent to locations where they will be required to perform functions beyond those they ordinarily perform in the normal course of their employment. Tr. 21069.

MAG 8.1.69.A - 8.1.69.D. The Applicants will augment nursing home personnel with numerous individuals (i.e., bus drivers, wheelchair van drivers and bed bus operators) who are trained to provide all of their transportation needs. Tr. 21272-73.

MAG 8.1.72. The Applicants have not designated any ambulances to transport special needs individuals because nobody requiring that level of care has been identified. Tr. 21072. See paragraph MAG 8.1.57.B.1, supra.

MAG 8.1.91.A. Contrary to the Mass AG's assertion, bed bus drivers are afforded emergency response training, evacuation bed training, emergency medical service training, basic first aid, CPR and patient lifting techniques training. Tr. 21070-71. The same training is provided to some route guides. Tr. 21072.

MAG 8.1.91.B. The decision to apportion transportation needs into thirds for the purpose of allocating vehicles was based on information gathered about the two hospitals located in the Massachusetts portion of the EPZ, in light of the Applicants' experience in working with similar New Hampshire hospitals and the experience of planners who had dealt with hospitals in other parts of the country. Tr. 21399. In order to verify the validity of this allocation, the numbers were compared to the numbers actually used by planners working under the direction of Massachusetts Civil Defense and to the numbers derived for New Hampshire hospitals. Tr. 21398.

SAPL 8.1.94. In large part, Ms. Mangan and Mr. Paolillo concluded that many of the ambulance companies will not be able to provide the number of vehicles set forth in the SPMC letters of agreement because they are all "up to" agreements, meaning that they only state the maximum number of vehicles which may be available. Mangan Dir., ff. Tr. 19429 at 1-2, 6-21. On cross examination, Ms. Mangan admitted that while she knew many of the companies had also entered into formal agreements to provide

vehicles, she had never seen one or asked about them during her investigation. Tr. 19298-99. After examining one of the agreements during the hearing, she conceded that it contained no indication that the number of vehicles indicated therein was only the maximum number of vehicles to be provided. Tr. 19299.

Despite SAPL's suggestion, the Board does not find it reasonable to expect the Applicants to train ambulance drivers employed by companies which have not entered in an agreement to provide transportation services.

SAPL 8.1.94.b. While it is undoubtedly true that ambulance companies did not contract to provide vehicles which they could not guarantee would be available, it is reasonable to assume that some additional vehicles will not be in use and will therefore be available should an emergency arise.

MAG 8.1.96.A - 8.1.96.B. Apart from the fact that this does not appear to be an issue raised by contention, the Applicants' assessment of transportation needs cannot be considered defective merely because special facility residents were not asked how many patients would require gerri-chairs as opposed to wheelchairs. In the event that a wheelchair van is too crowded to accommodate a gerri-chair, no reason appears why the individual could not be transferred to a wheelchair.

MAG 8.1.99.A - 8.1.99.D. The Applicants are currently in the process of reevaluating data on each elderly housing project in order to ensure that they can be contacted 24 hours per day. App. Reb. No. 6 ff. Tr. 21049, at 33.

SAPL 8.1.100. The Board perceives no significant problem with the approach discussed by Mr. Callendrello. As he testified, calculating the

dose reduction factors at the time of an emergency would have little impact on the calculation's accuracy or precision. Tr. 21549.

SAPL 8.1.100.a. The Board finds that the approach adopted by the Applicants in Massachusetts is acceptable. Even if the administrator decides not to implement the protective action which has been recommended for the general public, that decision will be supported. Tr. 21548.

MAG 8.1.100.A - 8.1.100.B. If an administrator needs advice whether to shelter or evacuate his residents because of medical considerations, he may obtain that appropriate advice by asking the special population liaison, who has telephone access to personnel in the EOC with training in health physics. Tr. 21548-49, App. Reb. No. 6, ff. Tr. 21049 at 33-37. It may be expected that any administrator who has such questions will ask the person who communicated the protective action message to him.

MAG 8.1.102.A - 8.1.102.D. The problems identified by Mass AG in this proposed finding have been corrected. Because the original plans called for one Special Population Liaison to be assigned to each community, FEMA determined that this staffing level could result in excessive times being required to notify special populations of the status of the emergency and to coordinate transportation needs. To correct this, the Applicants afforded the Liaisons the flexibility to assist each other in making their notifications. The Board concurs in FEMA's judgment that the revisions made by the Applicants have corrected these problems. See App. Ex. 43F at 251, App. Ex. 43E at 24.

MAG 8.103.B. The Mass AG has advanced no reason to believe that the potential sheltering areas which have been identified for EPZ schools are inappropriate.

MAG 8.1.106.A. The Mass AG's assertion that friends and neighbors may not be assumed to provide assistance to disabled persons is contrary to the Board's finding that a "therapeutic community" will develop in the event of an emergency. See PID ¶¶ 7.69 - 7.73.

MAG 8.1.108.A. While the Mass AG seems to suggest otherwise, the "helping behavior" of checking on one's neighbors is only supplemental to the assistance which the Applicants are to provide.

MAG 8.1.112.A. The Special Population Liaisons will act as the contact people for individuals with sensory impairments who need assistance to evacuate. App. Reb. No. 6, ff. Tr. 21049 at 50.

MAG 8.1.116.A. In light of the changes which have been made in the procedure for calling special facilities, there is no reason to believe that it would take 3 to 4-1/2 hours to complete any Liaison's list of calls.

MAG 8.1.117.A. By virtue of the helping behavior which can be expected to occur during a radiological emergency, it is highly unlikely that emotionally or mentally impaired individuals will be unable to engage in protective actions. App. Reb. No. 6, ff. Tr. 21049 at 46-48.

MAG 8.1.124.A - 8.1.124.D. St. Joseph's hospital has adequate technical information and treatment capabilities for handling contaminated injured individuals, as evidenced by the fact that it meets the standards for radiology or nuclear medicine of the Joint Commission on Hospital Accreditation (JCAH). App. Reb. No. 6, ff. Tr. 21049 at 55. The ability of St. Joseph's to provide appropriate treatment to contaminated injured individuals was demonstrated during the 1988 Seabrook exercise. App. Reb. No. 6, ff. Tr. 21049 at 57, App. Ex. 43F at 238-39.

SAPL 8.1.128. Since Attachment N to App. Reb. No. 6 only lists supplemental facilities, it need not contain an annotation as to capacity and special radiological capabilities or list only hospitals located outside the EPZ.

MAG 8.1.132.A - 8.1.132.C. The Board does not perceive any problem in the Applicants' reliance upon the average daily census of hospitals in calculating host capabilities. While it is estimated that there will be a need for approximately 248 beds, the Applicants have entered into letters of agreement with hospitals having a potential availability of at least 350 beds. App. Reb. No. 6, ff. Tr. 21049 at 61-63. Thus, even if the hospitals within the EPZ happen to be operating at a level above the average census when an emergency occurs, arrangements have been made for a sufficient number of beds at the host hospitals.

MAG 8.1.133.A. and MAG 8.1.136.A. An assessment of host hospitals' capability to receive intensive care patients was not performed, because the Applicants rely to a large extent on the numerous hospitals located in the greater Boston area to accept those patients, if necessary, under joint agreements between them. Tr. 21450. The testimony cited does not support the Mass AG's allegation that the Applicants rely upon those hospitals to absorb overflow from the host hospitals.

9. EVACUATION EQUIPMENT AND FACILITIES

MAG 9.1.25. FEMA did not include the Haverhill facility in the Extent of Play for the June 1988 exercise, since at the time the facility was unavailable for use as the Massachusetts staging area. App. Ex. 43F at v, footnote; Tr. 21756-57. To the extent that MAG challenges FEMA's judgment to observe a substitute staging area during the exercise or seeks

to demonstrate a flaw in the exercise, such issues are beyond the scope of the admitted contentions. Tr. 21812-15.

MAG 9.1.42.C. It is FEMA's opinion that those facilities which are expected to house more than 1000 evacuees each, are adequate for that purpose, even though it is not the current policy of the ARC to house more than 1000 persons in any one facility. Tr. 18726-27. FEMA is aware that the ARC has done so on at least one occasion, and believes that the intent of the policy is satisfied by establishing management structures within a large facility whereby separate managers are assigned responsibility for no more than 1000 persons. Tr. 18735-36. In effect, one facility is managed as if it were several facilities. Id.

MAG 9.1.46. The Mass AG here refers to an "official report" by FEMA. On the contrary, this document was a letter sent by Mr. Donovan to a "target audience." Tr. 18722-24.

MAG 9.1.57.A. Contrary to MAG's assertion, Donovan did personally review the survey information to verify its accuracy against the resource numbers represented as available in the SPMC. Tr. 18106-08, 18831-33, 18836.

MAG 9.1.57.C. FEMA did not examine the human behavior issue of whether individual drivers would actually respond in the event of a radiological emergency at Seabrook Station, Tr. 18913, nor is such an inquiry required by the planning standards and criteria of NUREG-0654.

MAG 9.1.64. FEMA verified the population count stated in the SPMC by examining 1980 census data and a political atlas. Tr. 18602.

10. COORDINATION OF GOVERNMENTAL RESOURCES AND RESPONSE

MAG 10.1.1.A., 10.1.1.F., 10.1.1.H. and 10.1.2.A. Since local governments within the EPZ refused to participate in emergency planning for Seabrook, it was not possible to evaluate those governments' interaction, communication and coordination with the ORO. However, the SPMC provides for trained liaison personnel to work with the Commonwealth and local governments. App. Reb. No. 21 ff. Tr. 23537 at 36. See generally section 1, supra.

MAG 10.1.2.C, 10.1.32, and 10.1.32.C. FEMA's evaluation of Exercise Objective 37 is contained in its Exercise Report. App. Ex. 43F at 204. The objective was to demonstrate the ORO's capacity to provide advice and assistance to the Commonwealth and the Massachusetts EPZ communities. Tr. 21666-07, MAG Ex. 93. The exercise was conducted in Mode 2 in order to permit as extensive an evaluation of the ORO's capabilities as was reasonably possible under the scenario. Tr. 22384. As a consequence, and because local Massachusetts governments decided not to participate in any exercise of the SPMC, the response capabilities of those governments (e.g., the depth of their personnel rosters, the quantity and quality of their training and equipment) were not and could not be evaluated.

During the exercise, the roles of The Commonwealth and of local officials were played by FEMA controllers [not evaluators]. Tr. 21738, Tr. 21740. Their only assignment was to inject controller messages simulating the delegation of legal authority to the ORO. Tr. 21741-42. The controllers were specifically instructed not to simulate the commitment of any resources or personnel to the exercise play. The purpose of the FEMA Control Cell was to enable FEMA to evaluate the ORO's

ability to communicate and interact with the governments and to respond to the governments' requests for assistance. The responses of the governments, simulated or otherwise, were not graded in any sense.

Tr. 21823.

MAG 10.1.2.E. In arguing that FEMA misunderstands the "realism" doctrine and has no basis to assume that Commonwealth officials will know what they are to do under the SPMC, the Mass AG faults FEMA for not having evaluated the familiarity of Commonwealth officials with the plan. This is nonsensical. As indicated in Section 1, supra, The Commonwealth has declared that it has no intention of participating in emergency planning for Seabrook Station and that it would return the SPMC unopened if the plan is sent to them. In these circumstances, FEMA has appropriately evaluated the ORO's resources and its ability to coordinate with Commonwealth officials; FEMA's evaluation of these matters is provided in its Exercise Report. App. Ex. 43F. FEMA's assumption that the Commonwealth will follow the SPMC reflects a proper understanding of the "realism" doctrine, consistent with the presumptions which this Board has voiced on several occasions that the Commonwealth will act in the best interests of its citizens and follow the SPMC in the absence of a better plan.

11. MISCELLANEOUS EXERCISE CONTENTIONS WITH RESPECT TO SPMC

MAG 11.1.1.E. The Mass AG incorrectly asserts, citing ALAB-900, that exercise scope should be presumed to be inadequate absent proof that participation in the exercise was all that was reasonably achievable. This assertion is not supported by ALAB-900. There, the Appeal Board only ruled that the applicant had "the burden of proving that the pertinent

regulatory requirements are satisfied," which burden had not been met. 28 NRC at 297. However, any "presumption" about the adequacy of the scope of the exercise arose only because the applicant there acknowledged that an insufficient number of schools had participated. Id. The applicant then failed to present any evidence that it had attempted to obtain greater participation, arguing that the lack of such evidence was a mere technicality. Id. at 297-98. In sum, ALAB-900 does not create a burden for the Applicants to prove that the scope of the exercise was sufficient unless it has first been demonstrated (or conceded) that exercise participation was somehow insufficient.

MAG 11.1.1.G. The Mass AG points out that if FEMA guidance is inconsistent with Commission regulations, the regulations prevail. However, guidance consistent with the regulations "is entitled to correspondingly special weight." ALAB-900, 28 NRC at 290. Moreover, here, FEMA's objectives for the Seabrook exercise have been found to be "sufficient to constitute a 'qualifying' exercise under 10 CFR Part 50, Appendix E, Section IV.F.1 in that it should test as much of the emergency plans as is reasonably achievable without mandatory public participation." Memorandum to FEMA from Frank J. Congel, Director, Division of Radiation Protection and Emergency Preparedness, June 23, 1988 (Att. G to App. Reb. No. 23, ff. Tr. 22702).

MAG 11.1.4. The Mass AG incorrectly characterizes the Applicants' proposed finding in asserting that the Applicants have admitted there was no verification of resources during the exercise. Further, regardless of the language in Applicants' proposed findings, FEMA does verify the use of

resources, the availability of resources, and the functionality of resources during an exercise. Tr. 21682.

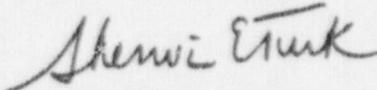
MAG 11.1.14. The Mass AG maintains that a "representative number, up to 100%" of facilities, staff and functions, must participate or be demonstrated in an exercise. In contrast, FEMA's view is that response functions should be demonstrated to the extent reasonable and feasible. FEMA assumes that responders know how to perform those functions which are among their normal daily duties (for example, a bus driver assigned to drive a bus) and, therefore, an adequate demonstration of those functions does not require an extensive deployment of resources. Tr. 22404-05. In contrast, it is more important to perform an extensive evaluation of emergency-specific response functions, which involve procedures and duties with which the responders would not be familiar on a normal daily basis and which would not be performed if it were not for the emergency or exercise. Id. The Board recognizes that the 1988 Seabrook exercise was the most extensive exercise evaluation ever conducted by FEMA, and that FEMA's resources are not unlimited. The Board further finds that FEMA's allocation of evaluators and efforts was reasonable, and was consistent with both the requirements of 10 CFR Part 50, Appendix E, § IV.F.1 and with the principle that a qualifying exercise should test every objective that is reasonable to test without mandatory public participation. See Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-900, 28 NRC 275 (1989).

## 12. NEW HAMPSHIRE EXERCISE PERFORMANCE

MAG 12.1.11. The Mass AG asserts that FEMA's exercise evaluation ratings are not controlling in determining whether a fundamental flaw has

been demonstrated. While this much is true, the Appeal Board has also made it clear that FEMA's findings have presumptive weight, and in the absence of a "Deficiency" rating, an intervenor will have a difficult task even in seeking the admission of contentions. Long Island Lighting Co. ALAB-903, 28 NRC 499, 507-08 (1988). Here, the only inadequacy identified by FEMA, within the scope of the admitted contentions challenging New Hampshire's performance in the exercise, was found to be an ARCA, not a deficiency. See App. Ex. 43F at 185. No fundamental flaw in the emergency plans has been demonstrated.

Respectfully submitted,



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Sherwin E. Turk  
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Counsel for NRC Staff

Dated at Rockville, Maryland  
this 31st day of August, 1989

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

DOCKETED  
UNIT

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

'89 SEP -1 A9:16

In the Matter of )

PUBLIC SERVICE COMPANY OF )  
NEW HAMPSHIRE, et al. )

(Seabrook Station, Units 1 and 2) )

OFFICE OF CLERK OF  
Docket Nos. 50-443 OL NRC & SERVICE  
50-444 OL BRANCH  
Off-site Emergency Planning

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF'S SUPPLEMENTAL PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW WITH RESPECT TO SPMC AND EXERCISE CONTENTIONS" in the above captioned proceeding have been served on the following by deposit in the United States mail, first class or, as indicated by an asterisk, by deposit in the Nuclear Regulatory Commission's internal mail system, this 31st day of August 1989:

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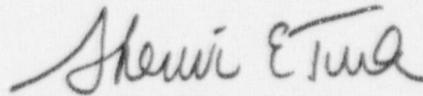
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