

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

Before Administrative Judges:  
Ivan W. Smith, Chairperson  
Gustave A. Linenberger, Jr.,  
Dr. Jerry Harbour

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USNRC

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In the Matter of

PUBLIC SERVICE COMPANY OF NEW  
HAMPSHIRE, ET AL.  
(Seabrook Station, Units 1 and 2).

Docket Nos.  
50-443-444-OL  
(Off-site EP)  
April 13, 1988

ATTORNEY GENERAL JAMES M. SHANNON'S  
CONTENTIONS SUBMITTED IN RESPONSE TO THE  
SEABROOK PLAN FOR THE MASSACHUSETTS COMMUNITIES

I. GENERAL INTRODUCTION TO THE CONTENTIONS SUBMITTED BY THE ATTORNEY GENERAL OF THE COMMONWEALTH OF MASSACHUSETTS

A. Position of the Commonwealth on Emergency Planning for the Seabrook Station

For a period of years, the Commonwealth of Massachusetts, including the state executive and local governments, attempted to formulate adequate emergency plans for the Massachusetts portions of the Seabrook plume exposure EPZ. The Commonwealth came to recognize, as a result of these efforts, that particular features of the Seabrook site made impossible planning that would adequately protect the health and safety of the relevant public. The large summer transient beach population, the limited means of ingress and egress to the beach areas, the meteorological site conditions and the absence

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of any available shelter for those on the summer beaches presented a particular profile of risk that no emergency plan formulated by the Commonwealth - no matter how technically competent - could meaningfully reduce. For those fast-breaking serious accidents included within the planning spectrum<sup>1/</sup> no protective measures are available and in the event of such an accident, these individuals would simply be abandoned without exposure-reducing alternatives. On the basis of this considered judgment, the Commonwealth withdrew its emergency plans for Seabrook from further consideration in September 1986 and has not engaged and will not engage in further emergency planning activities.

B. The Standard of Adequacy for Emergency Plans

In reaching this judgment and acting to withdraw its emergency plans, the Commonwealth was and is meeting its responsibilities under federal law. Under applicable federal law the Governor is to certify to FEMA that the State and local emergency plans are "adequate to protect the health and safety of its citizens living within the emergency planning zones." 44 CFR 350.7(d). In reaching its determination of inadequacy the Commonwealth applied the standards as clearly articulated by federal law: the Commonwealth was unable to certify that "[a]

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1/ These accidents are the raison d'être of the emergency planning regulations. The slow-paced and/or less serious accidents do not require as much, or perhaps any, pre-emergency planning. The adequacy of such planning, therefore, is a function of its efficacy in reducing the risks from those accidents for which effective planning is necessary.



range of protective actions have been developed for the plume exposure pathway EPZ for . . . the public" 10 CFR 50.47(b)(10) and that "there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency." 10 CFR 50.47(a)(1).

C. Emergency Planning Regulations as a "Site-Excluder"

In determining that it could formulate no adequate emergency plan for the Massachusetts portions of the 10-mile plume exposure EPZ, the Commonwealth expressly recognized that federal emergency planning regulations are "site-excluders," *i.e.*, that proposed operating plant sites - whether nuclear plants are already constructed on them or not - may be found to be inappropriate for an operating nuclear plant because particular features of the site make any adequate planning for off-site radiological emergencies impossible. This interpretation of the regulation is well-grounded in logic, law and history.

1. As adopted by the Commission in August, 1980, and reaffirmed in its amendment to 10 CFR 50.47(c)(1) in November 1987, the emergency planning regulations are preconditions that must be met prior to licensing. The regulations state that "no operating license for a nuclear plant reactor will be issued unless a finding is made by NRC that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency." 10 CFR 50.47(a)(1). The plain meaning of these regulations, then,

supports the Commonwealth's interpretation.<sup>2/</sup>

2. This required "reasonable assurance" finding is in addition to the necessary determination that a proposed emergency plan meets a checklist of planning standards. As a result, an adequate plan must provide "a range of protective actions" for the public under 50.47(b)(10) and in addition insure that "adequate protective measures" can and will be taken" in the event of an off-site emergency. 50.47(a)(1). This adequate protection standard was added to the emergency planning regulations in August, 1980 in response to comments on the December 1979 proposed rule. That proposed rule had simply identified the "planning guidance" (NUREG 75/111, the precursor of NUREG 0654) that would form the basis of NRC "concurrence" in State and local emergency plans but had not articulated an overall standard of adequacy.

3. Moreover, the history of the Seabrook case itself provides further support for the Commonwealth's view that the emergency planning regulations are to be interpreted as site-excluding regulations that prevent a license from issuing if a particular site cannot be adequately planned for. When ~~challenged~~ to revoke Seabrook's construction permit in 1980 after ~~the~~ new planning regulations had been adopted and it was

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2/ Moreover, the adequacy of emergency plans under 10 CFR 50.47 (b) is addressed at the construction permit stage for any proposed site. 10 CFR 50.34 (a)(10). Because the construction permit for Seabrook issued prior to 1980, no hearings on emergency planning were begun until after the reactor was constructed even though there is no question that the emergency planning regulations are applicable. See Public Service Company of New Hampshire (Seabrook Station, Units 1 & 2) 14 NRC 279, 285 (1981).

clear that emergency plans would have to extend to the large transient beach populations in the Seabrook environs, the NRC pledged to decide the question of planning adequacy at Seabrook at the operating license stage.

According to the Commission, if it appears at the operating license review that the infeasibility of EPZ evacuation renders it impossible for PSC [the Applicants] to provide the requisite "reasonable assurance," the operating license will not be granted.

Seacoast Anti-Pollution League of New Hampshire v. NRC, 690 F.2d 1025, 1030 (D.C. Cir. 1982). Thus, the NRC's position<sup>3/</sup> before the courts, which is the law of this case, supports the Commonwealth's reading of the adequacy standard as a substantive standard that not every site will necessarily meet at the operating license stage.

D. The Role of the States in Emergency Planning

Based on its understanding of the facts and its interpretation of the applicable law the Commonwealth does not

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<sup>3/</sup> The NRC did not argue to the Court of Appeals in defense of its refusal to revoke the Seabrook construction permit that those seeking that revocation were misinterpreting the nature of the emergency planning regulations. Obviously, if those regulations would always be able to be satisfied at the operating license stage (assuming compliance with the checklist of planning requirements) notwithstanding inherent site-specific limitations on the feasibility and availability of protective measures for a large portion of the relevant population, then, there would be no basis for revocation of the Seabrook construction permit because these regulations could not function as a bar to the issuance of an operating license. Instead, the NRC's position before the Court of Appeals indicated that it viewed the adequacy standard of 50.47(a)(1) as a potential site-excluder, but had simply deferred that issue to the operating license stage.

consider adequate emergency planning to be possible at the Seabrook site. The regulatory context makes clear that by design this judgment has been left in the first instance to the states. States are under no affirmative federal obligation to engage in emergency planning, yet at the same time, the NRC's "reasonable assurance" finding is to be based on whether "State and local [government] emergency plans are adequate and whether there is reasonable assurance that they can be implemented." 50.47(a)(2). Moreover, FEMA's requirements for submission of governmental emergency plans to it for licensing review include a certification that the proffered plans are "in the opinion of the state, adequate to protect the health and safety of its citizens living within the emergency planning zones." 44 CFR 350.7(d).<sup>4/</sup>

Congress in the 1980 Authorization Act, Pub. L. 96-295, 94 Stat. 784 (1980) specifically acknowledged that the adoption of

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<sup>4/</sup> States that do not participate further in emergency planning are not thereby failing to "cooperate" or committing any type of legally cognizable wrong. Thus, no estoppel of any kind runs against these governments when they assert that utility plans are inadequate even if the inadequacies are the result of the action or the inaction of these same governments. The burden is on the Applicant to propose utility emergency plans which must sustain a predictive adequacy finding even in the absence of governmental participation in planning. This Board may share the utility's frustration with this burden but may not lessen it simply because the governmental parties appearing before it add to its weight. The adjudicatory situation simply reflects the regulatory decision that a safe nuclear plant needs off-site planning and that adequate off-site planning needs government.

a license requirement concerning emergency planning transferred some authority over licensing to the states. At that time, the NRC was instructed to review and assess all state plans and then submit a report to Congress containing "its recommendations respecting any additional Federal statutory authority which the Commission deems necessary to provide that adequate plans and preparations for such radiological emergencies are in effect for each state. . . ." Id. at §109(b)(5). No such further statutory authority over the process of emergency planning has been requested by the NRC.

E. Regulatory Impasse and the New Rule Adopted in November 1987

The NRC has long recognized that the nature of off-site planning for radiological emergencies necessitates a role for State and local governments. Several of the 50.47(b) planning standards expressly reference State and local authorities and response organizations. Moreover, as has become clear, legal authority to engage in many of the activities necessary to an adequate emergency response rests with civil government. Thus, not only is State and local government, in the first instance, to judge the adequacy of its own emergency planning before submitting it for review, but the participation of those governments as a matter of fact and law is a practical necessity if any emergency planning is to provide "reasonable assurance that adequate protective measures can and will be taken."

In this context, the non-participation of the Commonwealth in further planning has produced a regulatory impasse. As the Commission indicated in its statement accompanying its March 1987 Proposed Rulemaking:

The absence of State and local governmental cooperation makes it more difficult for utility applicants to demonstrate compliance with the basic emergency planning standard, especially that part of the standard which requires reasonable assurance that adequate protective measures "will be taken" . . . . Thus, in actual practice, under the Commission's existing rules State or local governments may possibly veto full-power operation. . . . 52 Fed. Reg. 6981

In sum, this regulatory impasse is a function of three interconnected facts: (1) the NRC does not have and has not sought further statutory authority to insure the participation by relevant governments in emergency planning; (2) the NRC has determined that adequate emergency response (as distinguished from pre-emergency planning) requires the participation of State and local governments as a matter of fact and law; and (3) the NRC has required a predictive finding prior to licensing that "adequate protective measures can and will be taken" thereby foreclosing approval of a paper utility plan without the necessary determination that it would actually be effectively implemented.

1. The March 1987 Proposed Rule

The Commission's proposal of March 1987 was an attempt to resolve this impasse. The NRC proposed to add to 10 CFR 50.47 a new subsection (e) which would have permitted licensing in those situations in which State and local government was not



participating in planning without the necessary finding that adequate protective measures "can and will be taken." 52 Fed. Reg. 6980 (March 6, 1987). A utility plan would have been approved under the proposed rule without any predictive determination needed concerning the actual emergency response by government. Thus, factual uncertainties presented by government officials' statements concerning their emergency response and legal uncertainties involved in implementation of compensating utility plans were simply set aside by the proposed rule. If the utility plans' compensating measures were "reasonable and achievable under the circumstances [of non-participation]", then a license could issue.

## 2. The November 1987 Rule

The amendment to the planning rules as adopted in November was strikingly different in focus and effect from the earlier proposal. Instead of adopting a new subsection to 50.47, the NRC simply modified and expanded 50.47(c)(1). The "reasonable assurance" standard was retained as was the necessity of a case-by-case predictive determination of the actual response at the time of an emergency by the State and local governments.<sup>5/</sup>

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<sup>5/</sup> The NRC has recognized that its November 1987 Rule as adopted **did** not eliminate the regulatory impasse. In its Memorandum of April 8, 1988 filed with the First Circuit in defense of its November rule, the Commission stated:

To those who advocated licensing a power plant based on a utility "best efforts" emergency plan, the Commission frankly acknowledged that the approach it was adopting did not solve the "state veto" problem, and indeed made a "state veto" a de facto (though not a de jure) possibility. Brief for Respondents at 19-20.

In effect, the November rule codified the Commission's 1986 Shoreham opinion concerning "realism." CLI-86-13, 24 NRC 22 (1986).<sup>6/</sup>

3. Factual Uncertainties, Legal Impediments and Realism

In light of this regulatory history, several preliminary although potentially dispositive issues emerge in the adjudication of the adequacy of the SPMC. First, it is clear that factual uncertainties surrounding the actual effectiveness of an emergency response in those circumstances in which the State and local governments have not participated in planning are relevant under the new rule as they would not have been under the March 1987 proposed rule. Just as in CLI-86-13, the Commission in the new rule recognized that an assumed "best-effort" governmental response would not necessarily be adequate.

The NRC will determine the adequacy of that expected response, in combination with the utility's compensating measures, on a case-by-case basis. . . . 10 CFR 50.47(c)(1).

Moreover, not only are questions concerning the effectiveness of a governmental response left open, but the new

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<sup>6/</sup> In **codifying** its earlier law on utility-only planning, the Commission established preconditions to the application of the realism doctrine. These preconditions establish the initial threshold issues before the Board and the parties in litigating the adequacy of the SPMC. See infra Contentions 2 and 3.

rule does not resolve the issue of what the form and content of such a response will actually be. Although the new rule permits a presumption that governments may "generally follow" a utility plan at the time of an emergency, it is not appropriate for this Board to entertain this presumption in light of the circumstances of this case. See infra, Contentions 2 and 3.

Equally significant, the new rule does not resolve legal impediments that may prevent at least certain types of governmental response to an emergency. Specifically, if, as alleged here in Contention 6, state law prevents any delegation of police powers by the Commonwealth to the utility response organization, then any response scenario predicated on such a delegation (as is Mode 2 of the SPMC) cannot form the basis of this Board's predictive adequacy finding. In short, the new rule does not provide a utility organization the legal authority to implement its own plan and, if delegation of such authority is unlawful under state law, does not preempt such state law.

F. The Contentions Proposed

The Commonwealth has proposed contentions in light of this regulatory context. The Contentions are set forth under the following **general** headings:

- A. Legal and Threshold Issues
- B. Organization
- C. Communications
- D. Protective Measures
- E. Resources
- F. Training
- G. Accident Detection, Assessment and Prediction
- H. Behavior

Contentions 1-6 set forth legal and threshold issues which the Commonwealth views as preliminary to adjudication of the SPMC as a paper plan. These contentions assert:

- (1) that the SPMC will not be implemented or generally followed by the relevant governments and that no other plan exists to support an "adequacy" finding;
- (2) that 50.47(c)(1) should not be applied because the utility has not met the threshold conditions set forth in 50.47(c)(1);
- (3) that even if 50.47(c)(1) is applied at some point to the adjudication of the SPMC, the permissive presumption concerning what the relevant governments may do in an emergency should not be entertained at this juncture;
- (4) that even if the permissive presumption is entertained, no predictive adequacy finding will be possible on the basis of the SPMC because the record will reflect fundamental uncertainty as to what protective measures will be implemented, when and by whom;
- (5) that even if the relevant governments are presumed to "generally follow" the SPMC, there are fundamental factual uncertainties about the actual effectiveness of such a response, legal impediments to the implementation by the governments of the SPMC as it is presently formulated, and a complete lack of determinate content to such a presumption in light of the options approach taken by the SPMC itself, all of which preclude a predictive adequacy finding; and
- (6) that the SPMC contemplates an unlawful delegation of the police powers by the Commonwealth to an unincorporated association formed by a division of a bankrupt foreign corporation not licensed to do business in the Commonwealth, acting without prior approval of the Bankruptcy Court and engaging in activities that are ultra vires.

The Commonwealth intends to file shortly a motion proposing a structure for the litigation of these threshold issues.

## II. CONTENTIONS ON THE SPMC

### A. LEGAL AND THRESHOLD CONTENTIONS

CONTENTION 1: State and local officials responsible for emergency preparedness and response in Massachusetts have no intention of implementing or following the SPMC in the event of a radiological emergency at Seabrook. Based on its determination that no adequate planning is possible at this site, the Commonwealth will not participate in any tests, drills, exercises, training or otherwise engage in any planning for such an emergency. State and local officials will respond to any Seabrook emergency on an ad hoc basis in light of the resources, personnel and expertise then available. In light of this considered governmental position, the SPMC is irrelevant to this licensing proceeding.<sup>7/</sup> No emergency plan exists that meets the planning standards of 50.47(b) and further provides a basis for the finding of "reasonable assurance that adequate protective measures can and will be taken." 10 CFR 50.47(a) (emphasis supplied).

#### BASIS:

A. For a period of years, the Commonwealth of Massachusetts attempted to prepare an adequate emergency plan for the ~~Massachusetts~~ portions of the Seabrook plume exposure EPZ. Because of the particular features of the Seabrook site, the Commonwealth came to recognize that no emergency planning

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7/ The Applicant has acknowledged that NHY ORO could not implement the SPMC on its own.

"in the opinion of the state, [could be] adequate to protect the health and safety of its citizens living within the emergency planning zones." 44 CFR 350.7(d). For an entire portion of the spectrum of accidents which must be considered in designing and implementing emergency plans, no meaningful plan to insure the safety of significant numbers of people could be formulated for the Seabrook site.<sup>8/</sup> As a result, in September 1986, the Commonwealth ceased its planning efforts. In light of this experience, the Commonwealth does not regard the SPMC as anything more than a transparent effort by the Applicant to obfuscate the fundamental issues involved in licensing a nuclear plant which has not been appropriately sited. The SPMC, as a plan, contains no serious proposals to protect the particular populations at risk. It contains no provisions for timely evacuation of these populations, and no sheltering alternatives. In short, the SPMC is not a "plan" to protect these populations at all. As such, whatever the relevant governments' view may be concerning the relative superiority of a "planned response" to an emergency when compared with an ad hoc response, the SPMC is not and is not ~~considered~~ to be a bona fide emergency "plan" by these governments.

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<sup>8/</sup> Significantly, this portion of the accident spectrum includes those fast-paced serious accidents which present the most risk to the surrounding population. However, for a site that could be adequately planned for, adequate emergency planning can and does provide the possibility for significant and meaningful dose reduction in the event of these accidents.



B. The transfer of police power contemplated by the SPMC is not lawful and, thus, the Commonwealth could not as a matter of law implement or follow this plan. Moreover, the purported utility "response organization" is an unincorporated association formed and maintained by a division of a bankrupt foreign corporation not licensed to do business in the Commonwealth. Not only are the activities contemplated by this "ORO" ultra vires, but as a bankrupt, PSNH's activities in this regard require prior approval of the bankruptcy court exercising jurisdiction over its estate.

C. The relevant agencies and officials of the Commonwealth are unfamiliar with this plan and untrained and unpracticed in its details. In light of the considered judgment of the Commonwealth that no adequate planning for this site is possible, this situation will not change. Further, the Commonwealth views as suspect any emergency "plan" which is devised by this Applicant and rests upon the capabilities of New Hampshire Yankee and Public Service of New Hampshire. The record of these bankrupt organizations in effectively managing their normal business activities provides little basis for a decision by the Commonwealth to delegate to them its police powers in an emergency. Moreover, there is no recognition by the management of PSNH even of the need for emergency planning let alone the commitment necessary to actually create, staff, train and maintain an adequate emergency response organization. The most recent indication of this established and longstanding

corporate policy is the public position taken by the President and CEO of PSNH in December 1987. In response to an inquiry concerning the need for emergency planning, Robert J. Harrison stated:

I'd say it is marginal. The likelihood of any catastrophic event is so low that they are not needed. But the political requirements are such that they are necessary . . . . The fears are based more on emotion than they are on reason.

Under no imaginable scenario would the Commonwealth implement or follow an emergency plan devised and proffered by a corporation with such disregard for the nature of the collective social risk represented by nuclear power.

CONTENTION 2: There exists at present no record support for the application of 10 CFR 50.47(c)(1) to the litigation of the adequacy of the SPMC. As a consequence, because, as noted, the SPMC will not be implemented or followed, there exists no plan that meets the planning standards of 50.47(b) or 50.47(a).

BASIS: The threshold requirements of 50.47(c)(1) have not been met in this case. Specifically:

A. There has been no determination or finding that the Applicant has failed to meet the "applicable standards set forth in paragraph (b)" of 50.47.

B. The Applicant has not asserted that "its inability to demonstrate [such] compliance . . . results wholly or substantially from the decision of State and/or local governments not to participate further in emergency planning."

C. The Applicant has not demonstrated to the Commission's satisfaction that "(i) The applicant's inability to comply with the requirements of paragraph (b) of this section is wholly or substantially the result of the non-participation of State and/or local governments." Moreover, the Applicant has not detailed specifically which of the (b) standards it is unable to meet. In fact, the SPMC<sup>2/</sup> states at Plan 2.0-1 that the "NHV Offsite Response Organization ["ORO"] is fully capable of implementing an adequate emergency response in the absence of State and local participation provided that governmental authorizations are granted for actions which the NHV [ORO] lacks the legal authority to perform." Thus, several planning standards apparently can be met by the SPMC in the view of the Applicant and no "due allowance" pursuant to 50.47(c)(1)(iii) would be appropriate.

D. The Applicant has not demonstrated and cannot demonstrate to the Commission that "(ii) [it] has made a sustained, good faith effort to secure and retain the participation of the pertinent State and/or local governmental authorities, including the furnishing of copies of its **emergency plan**." First, the Applicant has engaged in a course of **conduct** over a period of years designed to circumvent the need for **Massachusetts** officials to participate in emergency planning at Seabrook. Specifically, beginning in 1985, the

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<sup>2/</sup> The SPMC will be cited as Plan, Pro- (Procedures), and App- (Appendix).

Applicant spent large sums of money attempting to have this Board reduce the plume exposure EPZ so that Massachusetts would no longer be within any portion of the required planning zone. These activities began prior to the determination by the Governor that no adequate planning for the Massachusetts portion of the EPZ was feasible and during the same period that the Commonwealth was attempting to prepare emergency plans. Second, over a period of years, the Applicants' lead owner, PSNH, and its Seabrook operating division, New Hampshire Yankee, have developed a conscious corporate policy toward emergency planning that has denigrated its purpose and function. This corporate policy rests on a two-fold basis: 1) an unremitting arrogance regarding the capacity of plant design to eliminate radiological risks to the public; and 2) the financial imperative that prevents the acknowledgement that a site does not become less inappropriate the more money is spent at it. Instead of a "sustained good faith effort to secure and retain" State and local participation, the Applicant has attempted to minimize the serious inadequacies inherent in planning for this site by: 1) understating the summer beach population, 2) shifting the planning focus onto those accidents for which ~~which~~ timely response is not imperative in any determination of adequacy; and 3) denying that there exists any substantive standard of adequacy against which emergency planning should be measured.

E. The Applicant has provided no detailed description of existing planning deficiencies or which of the SPMC's alleged "compensating actions" are designed to mitigate which specific deficiencies. As a result, no determination is possible concerning what planning standards are to be evaluated pursuant to 50.47(c)(1).

CONTENTION 3: Assuming arguendo that at some future time there is record support for the application of 10 CFR 50.47(c)(1) to the litigation of the SPMC, the permissive presumption set forth at 50.47(c)(iii) should not be applied to the SPMC. As a result, although this Board might assume that State and local governments will exercise their best efforts to protect the health and safety of the public at the time of the emergency, no presumption should be entertained that those officials "would generally follow the utility plan." In reality, as noted in Contention 1, these officials would respond to an emergency on an ad hoc basis. Such an incomplete and uncertain state of emergency preparedness cannot support a finding of adequacy under 10 CFR 50.47(a), (b), (c)(1).

BASIS: There is no rational basis for entertaining this ~~presumption~~ at this juncture in the proceeding:

A. The language of 10 CFR 50.47(c)(1)(iii) is unambiguous: "it may be presumed that in the event of an actual radiological emergency State and local officials would generally follow the utility plan." (emphasis supplied). That

"may" is to be interpreted in accordance with its plain meaning is supported by the following considerations:

1. In the very same emergency planning rule, the presumption that attaches to a FEMA finding on questions of adequacy is not a presumption that "may" be entertained by a licensing board. Pather, a FEMA finding "will constitute a rebuttable presumption" on questions of offsite planning. 10 CFR 50.47(a)(2). Thus, the Commission clearly intended the presumption set forth in 50.47(c)(1)(iii) to be at the discretion of the licensing boards.

2. The context for this presumption also makes it clear that it is discretionary, depending, for example, on the posture of the litigation at the point at which an applicant would have a Board entertain it.

In addressing the circumstances where applicant's inability to comply with the requirements of paragraph (b) of this section is wholly or substantially the result of non-participation of State and/or local governments, it may be presumed that in the event of an actual radiological emergency State and local officials would generally follow the utility plan. 10 CFR 50.47(c)(i)(iii).

As noted above, there has been no determination: a) that the applicant is unable to comply with the planning standards; and b) that its failure to do so is wholly or substantially the result of non-participation by the governments. In fact, the Commonwealth believes that the SPMC's failure to meet the planning standards is, in the first instance, a function of the



inherent inadequacy of any emergency planning for this particular site which has large transient populations close to the reactor without timely evacuation routes available or possible and without any adequate shelter. As noted, it was this considered judgment based on sustained, extended and unsuccessful efforts to produce adequate emergency plans that led the Commonwealth to withdraw its emergency plans.<sup>10/</sup>

In light of the fact that it is left to the discretion of the ASLB to entertain the 50.47(c)(iii) presumption and that the triggering conditions under which that discretion should be exercised are not met, this Board should not presume that the SPMC will be "generally followed" by the relevant governments.

B. There is also no basis in fact or law for presuming that the relevant governments will "generally follow" this utility plan.

1. Unlike the situation at Shoreham where an NRC determination has been made that the utility plan (but for certain issues of law and fact structurally connected to governmental non-participation) is in accordance with NRC regulations, the utility plan at issue here is simply a mound

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<sup>10/</sup> ~~The~~ Commonwealth contends that its non-participation in planning at this juncture establishes an independent and sufficient basis for determining that the NRC's planning standards are not met here. However, participation of State and local governments in emergency planning although necessary to any compliance with the planning standards, is not sufficient in this case in light of the inherent impossibility of any adequate emergency planning for this site. For this reason, there can be no showing at this juncture that but for the governmental non-participation, the Applicant would comply with the planning standards.

of paper not yet assessed, evaluated, litigated and defended. Unless and until it is determined to be an adequate plan in light of NRC and FEMA regulations, there is absolutely no basis for a presumption that the non-participating governments would implement it.<sup>11/</sup> In fact, as noted, because the Commission has established as a triggering condition for this presumption that a showing be made that the applicant's inability to comply with the planning standards "is wholly or substantially" the result of non-participation by the relevant governments, the Commission has recognized that the presumption may be entertained only after the utility plan as a paper plan has been determined to be generally in accordance with NRC regulations but for government non-participation. Any other course would have this Board presuming that the governments will "generally follow" a utility plan that the governments do

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11/ Following the lead of the ASLB at Shoreham, this Board should consider evaluating the plan under two aspects: 1) as a planning vehicle, ignoring the legal and factual issues involved in implementing it; and, if the SPMC is determined as a paper plan to be in accordance with NRC regulations, 2) as an actually implementable plan, shaped and altered by the legal impediments and limitations to such implementation by State and local officials under state law and the factual issues raised concerning the considered position of the governments not to implement the plan, their lack of familiarity with the SPMC, and the actual course of an emergency response by State and local officials who "generally follow" a plan but who are untrained in its details and unpracticed in its implementation. Until the SPMC is litigated in its first aspect, there is no rational basis for presuming the governments will implement it and thus no basis for pursuing the illusive issue of what the actual response would be if the SPMC were "generally follow[ed]" in the context of state law and the as-yet undeveloped factual record.

not believe is adequate and which this Board itself has not yet even determined is an adequate paper plan. Moreover, because this Board is to make "due allowance" in evaluating the SPMC for planning failures rooted in non-participation by government, it should be determined whether the SPMC is an adequate paper plan prior to any such modification of the evaluative standard. Otherwise, a utility plan that is independently inadequate as a planning vehicle will be evaluated under a modified standard and the plan's inherent independent defects may be illegitimately compensated for by misplaced "due allowances."

2. As set forth in more detail in Contention 6, which is incorporated herein by reference, the SPMC contemplates an unlawful delegation of the police powers by officials of the Commonwealth to an unincorporated association or organization ("NHX ORO") itself formed and apparently maintained by a division (New Hampshire Yankee) of a bankrupt foreign corporation (Public Service Company of New Hampshire) which itself is not authorized to do business in the Commonwealth. Moreover, as a debtor-in-possession, PSNH and its bankrupt division are not free to conduct activities beyond and outside the ordinary course of their business without the prior approval of the bankruptcy court having jurisdiction over the debtor's estate. No such approval as yet has even been sought, let alone obtained.<sup>12/</sup> Moreover, the activities contemplated

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<sup>12/</sup> Bankruptcy court approval for the activities contemplated by the SPMC would no doubt have to await the determination by the courts of the Commonwealth as to whether the contemplated delegation of powers to the NHX ORO would be unlawful under Massachusetts law.

in the SPMC -- including the unlawful delegation of the police powers to the NHY ORO -- are ultra vires under the relevant states' laws.

Before resolution of the issues raised by these threshold legal impediments to the implementation of the SPMC, it would be totally without rational basis for this Board, for purposes of litigating the SPMC's adequacy at this juncture, to presume the relevant governments would "generally follow" the SPMC.<sup>13/</sup> If the SPMC is not legal, the governments cannot and will not follow it. Consequently, until the serious legal issues are resolved, no presumption that has the governments "generally follow[ing]" a plan that is of questionable legality and which the governments view as illegal has a rational basis.

3. The presumption should not be entertained not only because the utility plan is not yet approved and is viewed as illegal, but because the relevant governments and governmental officials hereby represent that they will not "generally follow" the SPMC. In light of these uncontradicted representations, the Board has no basis on which to entertain the presumption that the SPMC will be generally follow[ed]."

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<sup>13/</sup> If the aspects of the SPMC which give rise to these legal issues are set aside -- delegation of police powers in whole or in part for the purposes of assuming responsibility in an emergency described as Mode 2 at Plan 3.1-2 -- the utility plan at issue reduces to nothing but a source of additional resources available to the governments as they engage in their ad hoc response. It is unclear what a presumption about following a utility plan that in this "mode" is simply a source of resources adds to an ad hoc response. In any event, such an illusive result would not constitute adequate planning under 10 CFR 50.47(a), (b) or (c).

CONTENTION 4: Assuming arguendo that at some future time there is record support for the application of 10 CFR 50.47 (c)(1) to the litigation of the SPMC, and this Board presumes that the relevant governments will "generally follow" that plan, that presumption will either be rebutted or its evidentiary significance eliminated by the Commonwealth. As a result, there would exist two evidentiary possibilities, neither of which could provide a basis for the requisite finding of "reasonable assurance that adequate protective measures can and will be taken":

1. Once the presumption is rebutted, the Board will find that the relevant governments will not "generally follow" the SPMC. As noted, in reality, the actual response of these governments would be ad hoc.

2. Once the presumption is rebutted, the Board will be unable to determine with any degree of certainty whether or not the relevant governments will "generally follow" the SPMC. (The governments will establish in the record that they will respond to an emergency on an ad hoc basis but will not "generally follow" the SPMC. Without benefit of the presumption, the Applicant will no doubt aver that the governments' response will result in the implementation of the utility plan.) The uncertainty surrounding this dispositive issue - whether the SPMC will be implemented - will make it impossible to find reasonable assurance that adequate protective measures "will" be taken.

BASIS: The presumption is not an irrebuttable one and the Commonwealth will rebut it. In the alternative, under NRC evidentiary law, the presumption would dissolve as a presumption in the face of the admission of credible contrary evidence.

A. For the specific reasons set forth as the basis for Contention 3, which are incorporated herein by reference, the Commonwealth will rebut the presumption: the utility plan has not yet been determined to be an adequate plan, it contemplates an illegal delegation of police powers<sup>14/</sup> to a bankrupt entity acting ultra vires and without prior approval of the relevant bankruptcy court, and the relevant governments will represent and affirm in the record that they will not implement the SPMC. The latter basis for rebutting the presumption is not foreclosed by the language of 10 CFR 50.47 (c)(1)(iii) which specifically identifies the described method of rebutting the presumption as an "example." As a general matter, a presumption does not act as a bar to the admission of otherwise

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14/ It should be noted that although no Massachusetts court has yet determined that the delegation of police powers contemplated by the SPMC is illegal, the relevant governments and officials including the Attorney General of the Commonwealth, view key portions of the plan to be illegal. Until the Massachusetts courts indicate otherwise, this shared view of the relevant governments that it would be illegal to follow the SPMC is weighty evidence contradicting any presumption entertained at this juncture that those governments will "generally follow" the SPMC. It should not be presumed that governments will act in a way that they view as illegal unless and until the Massachusetts courts have sanctioned such a course of conduct.



admissible evidence. Thus, any credible evidence that would contradict a presumption is admissible absent some other defect. Presumptions are tools for establishing the need for and the structure of evidence, but are not themselves evidence. They are certainly not conclusive evidence. See Fed. Rules Evid. 301. Further, remarks made by the Chairman of the NRC at the time 10 CFR 50.47 (c)(1) was adopted leave no doubt that the credible representations of relevant governments will rebut the presumption. On October 29, 1987 (the date the vote on the rule change was taken) NRC Chairman Zech stated that the new rule "doesn't assume they'll follow the [utility] plan if they say they won't, but we do assume that State and local governments will do their best to protect their citizens." Newsday, October 30, 1987, pages 3, 35.

B. Even if the presumption is not formally acknowledged to be rebutted, as an evidentiary matter, the uncertainty described above in Contention 4 point 2 will result from the admission of credible contrary evidence<sup>15/</sup> as to matters covered by the presumption. Under NRC law, a "presumption" provides no additional evidentiary support for a proposition if contradictory evidence is admitted. Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit No. 1), 14 NRC 1211, 1465 (1981). In such a circumstance, judgment is

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<sup>15/</sup> Evidence of what the relevant governments will do in the event of an emergency must be admitted, *inter alia*, because the SPMC itself posits two different modes of that response.

rendered on the strength of the evidence alone. (As noted, the record on this issue would contain as evidence the representations by the governments that they will respond in an ad hoc fashion and the arguments (without benefit of any presumption) of the Applicant that such a response would entail the implementation of the SPMC.) Thus, even if not formally acknowledged to be rebutted, the presumption will not have evidentiary impact sufficient to resolve the uncertainty that must attach to the dispositive issue of whether the SPMC will be implemented.<sup>16/</sup>

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<sup>16/</sup> Any other reading of 50.47 (c)(1)(iii) would transform the rebuttable presumption into a conclusive presumption. Nothing in the rule-making record supports the notion that no evidence should be admitted that indicates that the governments will not follow the SPMC. It is such evidence, of course, that dissolves the presumption, but if it is credible evidence, then that presumption should be dissolved if any decision on this issue is to have record support. Not to admit this evidence on this issue would simply result in interpreting the presumption as conclusive. Conclusive presumptions are generally avoided because they, inter alia, affect fundamental due process rights to a hearing. Moreover, the language of 50.47 (c)(1)(iii) is obviously not that of a conclusive presumption -- "may presume" and "may be rebutted, [ ] for example" -- and the rule-making record, which arguably does not even support a permissive presumption certainly does not support a conclusive presumption. The Commission itself in its Brief for Respondents filed with the First Circuit Court of Appeals in defense of 10 CFR 50.47 (c)(1) on April 8, 1988 stated at 40:

**Finally**, and importantly, this entirely rational, reasonable presumption is rebuttable on a case-by-case basis. In fashioning this presumption the Commission has merely drawn a logical inference and asked the parties to speak up if the facts of a particular case suggest that the inference is invalid as applied to that case. The use of a rebuttable presumption in these circumstances serves to encourage those in control of the evidence to come forward and present it. (emphasis supplied).

CONTENTION 5: Assuming arguendo that at some future time there is record support for the application of 10 CFR 50.47 (c)(1) to the litigation of the SPMC and this Board presumes that the relevant governments will "generally follow" that plan, the legal impediments to the implementation of the SPMC, the factual uncertainties surrounding such implementation and the optional approach taken by the SPMC itself preclude a finding that the state of emergency preparedness is sufficiently adequate to meet the standards of 10 CFR 50.47 (a), (b) or (c)(1).

BASIS: A presumption that the relevant governments will "generally follow" a utility plan does not overcome issues of both fact and law that arise of necessity when the "adequacy of that expected response" is adjudicated on a "case-by-case basis." 10 CFR 50.47 (c)(1).

A. As described in more detail in Contention 6, which is incorporated herein by reference, the actual implementation of the SPMC by the relevant governments would be severely limited by the law of Massachusetts.

1. Because the SPMC was drafted apparently in light of the ~~March~~ 1987 Notice of Proposed Rulemaking which proposed to alter the NRC's emergency planning regulations so as to make unnecessary any specific finding concerning what State and local governments will do in an emergency, it was drafted in the alternative permitting a range of ORO responses to match a

set of likely governmental responses to an emergency.<sup>17/</sup> As a result, it is not clear at all how the presumption that the relevant governments will "generally follow" the utility plan is to be made operational in light of the range of options left open to those governments in the SPMC.

2. However, one mode of response by the NHY-ORO may be summarily disposed of: the Stand-By Mode (Plan 3.1-2) which is not even a response mode. This Mode could not possibly form the basis of an adequacy finding under 10 CFR 50.47 (a), (b) and (c)(1) because none of the necessary emergency functions would be performed in this mode. Thus, a presumption that the relevant governments will "generally follow" the Standby Mode of the SPMC is an oxymoron.

3. There remains Mode 1 and Mode 2 as the only conceivable modes of response which the relevant governments could be presumed to "generally follow." However, Mode 1 involves nothing more than a purported notification of the relevant governmental officials by the NHY-ORO of an emergency

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<sup>17/</sup> Unhappily for the Applicant, 10 CFR 50.47(c)(1) as promulgated reaffirms the need for a finding that "adequate protective measures can and will be taken." If planning standards cannot be met by the utility plan, then under defined circumstances, it may be presumed that non-participating governments will "generally follow" the utility plan. However, the SPMC apparently was drafted on the assumption that no specific determination of what the governmental response would be was any longer going to be required. The result is a utility plan with three modes leaving open the important question of which mode the relevant governments are presumed to "generally follow."

situation. In response, the Commonwealth assumes responsibility for the emergency. See Pro-2.14 at 5, attachment 1 at 8 "Emergency Response Assessment." If the Commonwealth requires additional resources, NHY-ORO in Mode 1 proffers them, but the Commonwealth directs the response.<sup>18/</sup>

However, the SPMC does not detail what the Commonwealth's response would actually be under Mode 1 conditions. The SPMC does state at Plan 1.4-1, -2:

"Until State and local government emergency planning for Seabrook Station was halted in 1986, there was extensive participation in the planning process by both Massachusetts State and local public safety officials over a number of years. Thus, State and local officials have some familiarity and understanding of Seabrook Station emergency response needs . . . . The capabilities of the Commonwealth of Massachusetts are detailed in the Commonwealth of Massachusetts Radiological Emergency Response Plan (RERP) Appendix 3 to Hazard Specific Supplement, No. 6. The plan describes emergency response functions which the Commonwealth of Massachusetts has proved capable of carrying out for three operating nuclear power plants . . . . The [SPMC] does not rely on previously-developed State and local government resources but is intended to be compatible with, and capable of integrating State and local government responses should the governments choose to implement these resources in a real emergency."

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<sup>18/</sup> ~~That~~ the only function of the NHY-ORO in Mode 1 is to proffer resources is clear from Attachment 1 to Pro-2.14. The SPMC clearly describes any additional activity by NHY-ORO as requiring "authorization" by the Commonwealth which transforms a Mode 1 response into Mode 2. See also Pro-2.14, Attachment 7 at 27 which describes the activities beyond proffering resources which would require legal authorization "prior to implementation."

It is apparent, then, that Mode 1 posits the governments assuming responsibility for the emergency and following their own earlier plan.<sup>19/</sup>

Thus, the presumption that the relevant governments will "generally follow" the SPMC's Mode 1 actually tracks the governments' claim in Contention 1 that in the event of an emergency, State and local officials will respond at the time on an ad hoc basis in light of the resources, personnel and expertise then available.<sup>20/</sup>

4. Mode 2, then, is the only response mode to the SPMC which the relevant governments could be presumed, intelligibly, to "generally follow." But, as described in more detail in Contention 6, which is incorporated herein by reference, Mode 2 requires an unlawful delegation by State and local officials of core police powers to an unincorporated entity formed and maintained by the subsidiary of a bankrupt foreign corporation not authorized to do business in

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19/ There is no State or local governmental plan for a Seabrook emergency before this Board or in existence as a plan in the Commonwealth. If it is presumed that it is an earlier withdrawn state plan that will be "generally follow[ed]" then, at the **very** least, that plan(s) should be filed by the Applicant and litigated instead of or in addition to the SPMC.

20/ If a presumption that the relevant governments "generally follow" the SPMC - Mode 1 means something more or other than this, the Applicant should so specify. If the Applicant intends that the governments would "generally follow" the SPMC - Mode 1 by following the details of the SPMC without any Mode 2 - type authorization or delegation of authority to the ORO, then this should be stated. See *infra*, this Contention, Basis B and C for the factual uncertainties surrounding the presumption understood in this way.



Massachusetts and proposing to engage in activities that are ultra vires under the relevant states' laws. Without such authorization or delegation in whole or in part of the police powers to the NHY-ORO, there is little meaning to the presumption that the relevant governments would "generally follow" the SPMC - Mode 2.<sup>21/</sup>

5. To the extent the presumption is interpreted to mean that the relevant governments "generally follow" the SPMC (either Mode 1 or Mode 2) not by following a state plan and not by authorizing the NHY-ORO to act but by acting with their own personnel in accordance with the SPMC, there are two further difficulties - one of fact and one of law:

a. As a matter of fact, (see also infra this Contention, Basis C) most of the SPMC qua plan describes what the NHY-ORO's personnel will do, how they will do it and where they will do it. Obviously, these internal aspects of the SPMC cannot be "generally follow[ed]" by the relevant governments at the time of an emergency. Moreover, the relevant governments will not be familiar with the SPMC and will not have trained or exercised with it. It is unclear how the relevant governments could "**generally follow**" the SPMC in these circumstances.

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<sup>21/</sup> It goes without saying that, if the delegation or authorization described in Mode 2 is unlawful under state law, this Board may not presume that in "generally follow[ing]" the SPMC - Mode 2, the relevant governments nonetheless so delegate or authorize the NHY-ORO to act. If it can not be done under law, then an attempt by the relevant governments even under conditions of emergency to delegate these powers would not legitimize the NHY-ORO actions. No plan based on unlawful activities can be countenanced by the NRC.

b. The SPMC creates nine liaison positions staffed by NHY-ORO personnel, one local EOC liaison for each Massachusetts town and three state liaisons -- one for the state EOC, one for the Area I EOC and one for the Massachusetts Department of Public Health. As detailed in Contention 6, which is incorporated herein by reference, if these individuals are presumed at the time of an emergency to communicate the details of the SPMC to the relevant governmental officials, advise them as to necessary decisions and actions in accord with the SPMC and otherwise actively direct the State and local response, then in these circumstances such involvement would constitute an unlawful de facto delegation of the police powers prohibited by state law.

As a result, it is not possible to interpret the presumption that the relevant governments will "generally follow" the SPMC without either assuming an unlawful de facto authorization of police powers to NHY-ORO personnel similar to the express unlawful delegation described in Mode 2 or positing that government personnel will "generally follow" a plan at the time of an emergency with which they have no prior familiarity or **experience** (by training or through exercises).

B. **Factual** uncertainties also surround any presumption that the relevant governments will "generally follow" the SPMC. Not only does the SPMC have a modal structure which permits a range of governmental responses, but Mode 2 permits authorization by the governments to the NHY-ORO to perform all

or part of the emergency response. Plan 3.1-2. The result is a complex matrix of possibilities, any one of which would be in accordance with the presumption that the relevant governments "generally follow" the utility plan. No one response, however, would be any more or less likely (assuming its legality) to occur.<sup>22/</sup>

The result of such a bad fit between a presumption that the relevant governments will "generally follow" a utility plan and a utility plan that posits a large number of possible governmental responses is a high degree of uncertainty about what form an emergency response would actually take. In short, the presumption applied to the SPMC does not begin to provide answers to the specific questions raised in a "case-by-case" adjudication of the "adequacy of that expected response." 10 CFR 50.47(c)(1).<sup>23/</sup>

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<sup>22/</sup> Some idea of the number of possible responses, each in accordance with the SPMC, can be gleaned by examining Attachments 7 and 8 to Pro-2.14. Attachment 7 indicates that the Governor could (or could not) authorize the NHY-ORO to perform any combination of seven emergency functions. Attachment 8 indicates that 10 emergency functions subdivided into a total of 44 activities can each separately be allocated to the NHY-ORO (or not) for 7 separate jurisdictions (the state and the ~~6~~ towns). For example, taking only 1 of these activities, notification of special populations, if the relevant governments are presumed to "generally follow" the SPMC, responsibility for this activity might lie with the NHY-ORO for Amesbury, with the local government in Merrimac, again with the NHY ORO for Newbury, etc. The possible combinations for all emergency activities is extremely high.

<sup>23/</sup> To avoid a contention even more prolix than this one, the specific open questions involve who would actually perform, take responsibility and control each of the 44 emergency activities set forth at Pro-2.14, Attachment 8, pages 28-31. Who, when, how, and where are all open questions in light of the SPMC's modal structure.

C. Even if some fix could be made on what each of the governments will do in "generally follow[ing]" the SPMC, the governmental response would remain an ad hoc response. If it is assumed that the relevant governments do anything more than initially authorize the NHY-ORO to respond as described in Mode 2 (but which is unlawful) that additional governmental response will be an ad hoc effort to follow a utility plan with which State and local personnel are totally unfamiliar and which they do not even possess. Any familiarity that governmental personnel have with earlier withdrawn state plans would not avail them at the time of an emergency because the SPMC makes no specific reference to such plans, State and local personnel are no longer familiar with earlier plans, these personnel change over time and the overall state wide radiological emergency response plan is a plan of limited detail that is actually made operational by specific local planning, none of which has taken place here. Further, it is not even easy to imagine, let alone find, that at the time of an emergency, nine State and local governmental liaisons from NHY-ORO and their two superiors, the Assistant Offsite Response Director, Support Liaison and the local EOC Liaison Coordinator, who remain at the NHY-ORO EOC, could communicate the essentials of the SPMC to the necessary State and local officials. (The SPMC does not even, at least at present, describe such a function for these positions. See Plan 2.1-4, -5, -20, -21, -22.)

CONTENTION 6: The SPMC contemplates an unlawful delegation of the police powers of the Commonwealth by State and/or local officials to an unincorporated association or organization itself formed and maintained by a division of a bankrupt foreign corporation not licensed to do business in the Commonwealth. Activities envisioned for this entity are ultra vires under the relevant states' corporation laws. As a debtor-in-possession, PSNH's activities outside the ordinary course of business -- such as being the unlawful delegatee of the police powers of a sovereign state -- require prior approval of the bankruptcy court having jurisdiction over the debtor's estate. Without such approval these activities are not permitted under the Bankruptcy Code. As a corporation not licensed to do business in Massachusetts, PSNH and its division NHY are not authorized to engage in the contemplated activities - i.e., act as the delegatee of the police powers of Massachusetts. In sum, the SPMC can not be "generally follow[ed]" by the relevant governments because it contemplates an unlawful delegation of power to an apparent entity behind which operates a corporation not licensed to engage in the ~~contemplated~~ activities in Massachusetts and not authorized to do so ~~by the~~ court which now supervises it. Further, the activities themselves are ultra vires under the laws of New Hampshire and Massachusetts.

BASIS: A.1. In a section of the Plan entitled "Authority", the Applicant provides a completely cursory and misleading description of the legal basis on which the NHY-ORO is to be authorized to perform identified emergency activities. Plan 1.2 -1 to -3. After describing certain sections of the Civil Defense Act ("CDA"), Massachusetts Special Laws c. 31, the Plan states:

The administrative authority of the Governor [under the CDA] may be delegated to the MCDA/OEP [Massachusetts Civil Defense Agency/Office of Emergency Preparedness] Director. The Director may subdelegate such authority as provided. Section 4 of the Commonwealth of Massachusetts Radiological Emergency Response Plan [RERP], Appendix 3 to Hazard Specific Supplement No. 6, specifies the responsibilities delegated to the MCDA/OEP and others. Plan 1.2-2 (emphasis added)

Neither the CDA nor the Massachusetts RERP provide any basis whatsoever for a delegation of the police powers by the Governor or his "designee" to a foreign private corporation. See Plan 3.1-1.<sup>24/</sup>

2. The Applicant acknowledges throughout the SPMC that the NHY-ORO can not legally implement the SPMC on its own. For example, at Pro-2.14 Attachment 7 page 27, there is a list of **seven** emergency response actions which the Applicant **acknowledges** cannot be implemented without prior authorization from **the** Governor:

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24/ The SPMC claims at various points that the Governor, his "designee", the Director MCDA/OEP, the Director's senior duty officer, or the duty officer who happens to be at the Framingham EOC at the time, all could authorize the NHY-ORO to implement the SPMC. See Plan 3.1-1; Pro-2.14, at 5. No support is offered for these claims.



- 1) Activating the Prompt Notification System and broadcast of EBS messages;
- 2) Making recommendations for protective actions to the public;
- 3) Making Ingestion Pathway Protective Action recommendations to the public;
- 4) Making recommendations for recovery and reentry to the public;
- 5) Directing traffic and blocking roadways;
- 6) Performing access control; and
- 7) Removing obstructions from roadways, including towing private vehicles without owner permission.<sup>25/</sup> In addition there are other police powers not listed by the Applicant which the governments would have to delegate unlawfully to NHY-ORO if the SPMC were to be successfully implemented;
- 8) Command and control over the emergency response;
- 9) Contemporaneous planning and response to contingencies as they arise during an emergency;
- 10) Authority to direct and control State and local personnel engaged in emergency response;
- 11) Authority to request federal assistance pursuant to the FRERP;

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<sup>25/</sup> This list essentially tracks the 10 Legal Contentions filed by Intervenor in the Shoreham proceeding in 1983. The list also appears in NUREG 0654, Rev. 1, Supp. 1 ("Supp 1") at II. A.2.a. The SPMC does not state the applicable Massachusetts law that reserved these functions to State and local governments as required by Supp. 1. *Id.*

- 12) Authority to communicate the views of the relevant governments to the public and to third parties;
- 13) Control over all offsite field monitoring, sample collection and accident assessment;
- 14) Power to make actual decisions that result in protective action recommendations for the two planning zones and for reentry and recovery;
- 15) Authority to identify areas of danger and determine that they are areas from which the public should be excluded;
- 16) Authority to secure and protect private property during the period of an emergency;
- 17) Authority to coordinate and implement the evacuation of all governmental buildings and facilities;
- 18) Power to exercise control over individuals whose behavior during an emergency puts others at immediate risk of harm or impedes the implementation of protective measures; and
- 19) Power to control and regulate the food, milk and water pathways within 36 hours of an emergency.

To the ~~extent~~ that the Applicant denies that these powers need to be delegated to the NHY-ORO, the Commonwealth contends that absent such powers the NHY-ORO could not successfully implement the SPMC and that no finding that adequate protective measures will be taken can be made. Activities that are likely going to

be required for successful implementation of the SPMC during an emergency -- such as controlling individual instances of deviant behavior -- even if not detailed and set forth in the paper plan, must be assumed to be within the power of the NHY-ORO or otherwise in an actual emergency it will be unable to successfully implement its plan.

All of these enumerated powers make clear that what is contemplated, if the SPMC is to be successfully implemented, is a fundamental transfer of the police power of Massachusetts to the NHY-ORO. However, the constitutional, statutory and case law of Massachusetts make clear that not only may private parties not unilaterally exercise such police powers, but these powers are exclusively reserved to the state and its subdivisions and may not be delegated to private parties. Opinion of the Justices, 105 N.E.2d 565, 566 (1952) (citing the Massachusetts Constitution Declaration of Rights, Art. 30, part 2, c. 1, sections 1, 4; Amends. 2, 70); Civil Defense Act, § 4, Special Laws c. 31 (legislature has delegated police powers to Governor to prepare for and respond to radiological emergency).

3. Without an express authorization of the police powers, ~~the~~ NHY-ORO simply cannot implement the SPMC. Further, if the ~~relevant~~ governments were assumed to implement the SPMC, not by express delegation of authority, but by following the directives of NHY-ORO personnel who advised, directed and guided the emergency response, such emergency response puppetry would constitute a de facto delegation of authority to the NHY-ORO.

B. As a debtor-in-possession, PSNH's activities outside the ordinary course of business require prior approval of the Bankruptcy Court supervising the debtor's estate. 11 U.S.C. § 363(b)(1). No such approval has as yet been obtained or even sought by PSNH and/or NHY. Thus, the statement made at Plan 3.1-1 that "[t]he NHY Offsite Response Director has been authorized by the President of New Hampshire Yankee to commit the resources of the Company (money, manpower, facilities, and equipment) through the NHY [ORO], to respond in the Commonwealth of Massachusetts to protect the public . . ." begs the question. Such "use" of the property of the estate of the bankrupt can not be effectively authorized without prior Bankruptcy Court approval. See also App. C, letter from Edward A. Brown dated September 9, 1987. That such activities would be outside the ordinary course is established, inter alia, by the fact that PSNH and/or NHY would require prior legal authorization to engage in them.

C. PSNH is a foreign corporation as defined at M.G.L. c. 181, § 1 and the activities contemplated in the SPMC - both at the planning phase and at the implementation phase - constitute doing business in the Commonwealth under M.G.L. c. 181, § 3.<sup>26/</sup> As such, PSNH is statutorily required to

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<sup>26/</sup> To the extent New Hampshire Yankee is functioning only as a "managing agent" for the Seabrook Owners then its pledge of its own resources is suspect. Moreover, even as a "managing agent" NHY is "doing business" under c. 181, § 3. Finally, the Seabrook Owners individually are "doing business" in the Commonwealth as a "principal" with a managing agent. Yet, three of these owners are not authorized to do business in the Commonwealth. Together these three own 50% of Seabrook.

file a certificate or report of condition with the Secretary of State pursuant to M.G.L. c. 181, § 4 identifying those activities in which it is engaged in the Commonwealth. (It should be noted that foreign corporations are prohibited from all activities also prohibited to domestic corporations under the laws of the Commonwealth. M.G.L. c. 181, § 2) PSNH has not filed such a certificate. As a result of this failure PSNH is subject to fine, is disabled from maintaining any action in the courts of the Commonwealth and may be enjoined and restrained from further activities in the Commonwealth. In short, the present activities of PSNH with regard to emergency planning are not presently authorized by law.

B. ORGANIZATION AND ORGANIZATIONAL CONTROL

CONTENTION 7: At this juncture, the Lead Owner Public Service of New Hampshire ("PSNH") is in bankruptcy as is its Seabrook operating division New Hampshire Yankee (NHY). NHY is ostensibly the immediate corporate form behind the organization identified in the SPMC as the NHY-ORO. At Plan 3.1-1, the SPMC asserts that "[t]he NHY Offsite Response Director has been authorized by the President of New Hampshire Yankee to commit the resources of the Company (money, manpower, facilities, and equipment) through the NHY [ORO], to respond in the Commonwealth of Massachusetts to protect the public . . . ." Further, the letters of agreement contained in Appendix C indicate that the Joint Owners and the bankrupts will share the expenses of emergency planning as they share other Seabrook expenses -- PSNH will bear 35% of the cost and liability will be neither joint nor joint or several as to the other presently solvent Joint Owners. In light of these facts, there is no assurance that sufficient funds will be available to maintain an adequate level of emergency preparedness. Therefore, the **utility plan** is in violation of all of the planning standards set forth at 50.47(b) and no reasonable assurance finding pursuant to 50.47(a)(1) can be made.

BASIS:

A. As a debtor-in-possession PSNH is not permitted to expend funds outside the ordinary course of its business



without prior Bankruptcy Court approval. 11 U.S.C. § 363(b)(1). Therefore, 35% of the expenses presently incurred in developing, staffing and training the ORO have an uncertain source. Moreover, even if the activities of pre-emergency planning are considered to be within the ordinary course, funds expended during an actual emergency would most certainly not be in the ordinary course.<sup>27/</sup> But these funds must be found to be available to the Applicants prior to licensing, otherwise, there is a no "reasonable assurance" finding possible. Thus, in the absence of any representation by the Joint Owners that the liability for all emergency planning expenses is joint and several, reasonable assurance concerning available funds must wait upon a Bankruptcy Court determination.

B. At present, there are contractors who have provided services arising out of the utility's efforts to develop and maintain an emergency response capability which have not been paid, no doubt because of the lack of prior authorization by the Bankruptcy Court to make such payments.

CONTENTION 8: At an organizational level, the SPMC fails to adequately establish and define the relationships between the ORO ~~and~~ other organizations which are expected and relied upon to perform emergency response activities. Further, the SPMC does not adequately provide for effective coordination of

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<sup>27/</sup> No assumption should be made concerning a quick resolution of the Chapter 11 proceeding as a result of plant licensing.

effort between or clearly delineate the primary responsibilities of these other organizations and the ORO. As such, the SPMC does not meet the planning standards set forth at 50.47(b)(1), (2), (3), (5) and (6); 10 CFR Part 50, Appendix E, IV, A.6, 7, 8; and the planning guidance set forth in NUREG 0654 II. A.1.b., c, 2.a., b, 3; B.6, 9; C.5 (Supp. 1); E.1; and F.1.

BASIS:

A. The SPMC creates nine liaison positions staffed by ORO personnel, one local EOC liaison for each Massachusetts town and three State liaisons, one for the State EOC, one for the Area 1 EOC and one for the Massachusetts Department of Public Health. The function and role of these liaison personnel is left completely undefined, see Pro-1.8 and 1.11, except that it is clear that at the time of an emergency these individuals are to deliver copies of the SPMC to local officials (including the Plan, Procedures and Appendices J and M) if they are permitted to go to the local EOCs. There is no procedure in the SPMC to insure that these liaison personnel are themselves knowledgeable about the SPMC (other than what it looks like) so that they could intelligibly respond to inquiries concerning its structure and function, or otherwise "advise and assist state and local officials in implementing"

portions of the SPMC. NUREG 0654, Supp 1, II.C.5. Moreover, there is no portion of the SPMC which would provide any indication to a local governmental official of the actual role to be performed by specific local organizations. In short, the liaisons fail to establish any organizational or communicational link between the ORO and the local organization which are relied upon to perform certain emergency activities. See Plan, Table 2.0-1.

B. The SPMC states that "law enforcement, fire and rescue needs and snow removal agencies are expected to be within local capabilities supported by mutual aid agreements and it is assumed that in an emergency, these agencies [sic] will continue to carry out their normal emergency functions." Plan 2.4-3, -4. The ORO will assist these "agencies" with "appropriate emergency information and exposure control." Plan 2.4-4.

1. There is no basis for the assumption in the SPMC that local capabilities will be augmented or supported by "mutual aid agreements." Obviously, other EPZ towns will not be able to provide such assistance and no prior arrangements or procedures are set forth in the SPMC to enable non-EPZ towns to identify the need for resources or to penetrate the EPZ access control to supply such resources. Thus, there is only an assumed coordination of effort described by the SPMC.

2. What is needed during a radiological emergency is something different from "normal emergency functions." The particular problems of security, public health, timely evacuation and emergency-specific rescue needs in addition to the overall scope and extent of the emergency response make the SPMC's reliance on business as usual totally inadequate. Because the SPMC has not even adequately identified the emergency responsibilities of police, fire and rescue agencies during a radiological emergency, it certainly has not assigned or established them adequately. See 50.47 (b)(1). Moreover, the SPMC would be of absolutely no assistance to local emergency workers or officials at the time of an emergency if they desire to participate in an ad hoc fashion.

C. The SPMC totally lacks local plans that are specific to the six Massachusetts communities and totally ignores the particular established routines existing in these communities for response to emergencies. Thus, no effective ad hoc relationship will develop between the ORO and the local communities making effective emergency response on the basis of the SPMC impossible.

D. There is no procedure for the notification of supporting organizations concerning which mix of authorization -- as to activity and jurisdiction -- is to be implemented by the ORO. As a result, none of the supporting organizations will be informed as to who has control and command over any

particular portion of the response. Further there is no delineated relationship between ORO personnel and non-ORO employees of support organizations as to issues of control and command, responsibility and liability.

E. The SPMC does not detail how a delegation of authority during an emergency would actually take place. No verification procedures are set forth that would insure that the specific content of state authorization is understood and verified. Further, no verification procedure exists as to the identity of those giving and receiving such authorization.

F. The SPMC does not detail what emergency response activities can be implemented or what mitigating actions will be taken for those activities for which no authorization is forthcoming from the State. The SPMC does not indicate how the ORO will modulate and specify its response to accord with the specific authorization mix --as to activity and jurisdiction-- that results at the time of an emergency. See Pro-2.14, Attachments 7 and 8.

G. The SPMC fails to indicate that effective planning has been done to coordinate the ORO and the SPMC with the state of New Hampshire's emergency response organizations. In fact, the SPMC does not even indicate that necessary New Hampshire personnel have read the SPMC or been trained with it. See App C, pages C-1a-1d.

CONTENTION 2: The SPMC fails to provide necessary procedures to insure that employees of NHY, PSNH and other utilities who staff the ORO and who will exercise critical functions such as command and control in the event of a radiological emergency at Seabrook have the requisite independence and autonomy to exercise their emergency responsibilities effectively. Because the ORO staff individually and collectively is not independent of the owners of Seabrook, it will not plan for, order, manage, coordinate or control the emergency response adequately. As a result the SPMC is not in compliance with 50.47(a)(1); 50.47(b)(1), (3); Part 50 Appendix E, IV, and NUREG 0654 II.A.

BASIS:

A. The ORO officials in command and control positions are utility management employees whose life and livelihood are intimately connected to the Seabrook Station and the nuclear industry. These individuals will have a personal, institutional and financial interest in minimizing the public's perception of any potential or actual danger. Moreover, these individuals, even acting in good faith in making a decision about public notification and possible protective response, may weigh in that decision the negative future impact such a notification may have on future plant operation. Such a lack of independence and autonomy of judgment in those responsible for making public health and safety decisions is not acceptable. Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1), 21 NRC 644, 682 (1985).



B. The individuals staffing the ORO are employees of NHY, PSNH or other utility employees. As such, they are directly under the managerial authority of their respective employers even during such time as ORO would be mobilized. In fact, the "ORO" itself is an unidentified association or organization that apparently does not function as an employer.<sup>28/</sup> As a result, those ORO personnel having critical decision-making authority under the SPMC are in fact responsible to undisclosed others whose interests may be adversely affected by an emergency. Such an arrangement does not insure adequate decision-making.

C. "Persons holding important positions in a nuclear utility's day-to-day organization will experience strong forces urging them to interpret any ambiguous situation in the company's favor." Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1), 21 NRC 644, 685 (1985). Appropriate measures have not been proposed or identified in

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<sup>28/</sup> It is not at all clear from the Plan what "ORO" is. It appears to be a d/b/a of NHY and/or PSNH although its capacity to contract in its own name, for example, is not certain. See App - C, at C-1b where NHY "represents" the NHY ORO and contracts in or on its behalf. None of this uncertainty, however, apparently will daunt the ORO Offsite Response Director from requesting of the Governor of Massachusetts that he delegate core police powers of a sovereign state to the "ORO." For complete confusion on this point, cf. NUREG 0654 Supp, 1 which at 3 "defines" an ORO as a utility offsite emergency response organization "along with other participating voluntary and private organizations, and local state and Federal governments engaging in the development of offsite emergency plans . . . ." According to this definition, the "NHY ORO" includes bus companies as well as the state of New Hampshire.

the SPMC to resolve this basic inadequacy. The SPMC has not even attempted to establish a separate management reporting level similar to that required by NRC regulations concerning quality assurance and safety. See 10 CFR Part 50, Appendix B, I.

CONTENTION 10: No provision is made in the SPMC for procedures to be employed in the event of a strike or other form of job action affecting the availability of the emergency personnel relied on to adequately staff and maintain the NHY ORO. In the absence of such procedures, this utility plan does not provide reasonable assurance that adequate protective measures can and will be taken. See Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1), 21 NRC 644, 888 (1985).

CONTENTION 11: The Applicants and their Lead Owner PSNH have a developed, self-conscious and articulated position and policy toward emergency planning for the 10-mile plume exposure EPZ, including the portions of that EPZ that lie within Massachusetts. In a word, that corporate policy considers emergency planning for such an area unnecessary. Because of this long-held public position, the utility in this case is completely and totally unable to develop and maintain an emergency response organization that would successfully implement the SPMC. Thus a utility plan in this case is unable to meet any of the planning standards set forth in

50.47(b) and no finding that "reasonable assurance that adequate protective measures can and will be taken" is possible pursuant to 50.47(a)(1).

BASIS:

A. The management of NHY and PSNH does not consider emergency planning for the 10-mile plume exposure EPZ to be necessary or even rational in light of the design basis of the Seabrook Station. The most recent manifestation of this corporate position appeared in December 1987 when the President and CEO of PSNH in response to an inquiry concerning the need for emergency planning and emergency plans stated:

I'd say it is marginal. The likelihood of any catastrophic event is so low that they are not needed. But the political requirements are such that they are necessary . . . . The fears are based more on emotion than they are on reason.

That these corporate sentiments are not peculiar to the person is clear from the repeated efforts made by the Applicants to have the 10-mile plume exposure EPZ reduced to a 2- or even a 1-mile EPZ. This corporate attitude, expressed publicly by top management at a time when a utility "plan" had already been submitted for consideration, is pervasive and of long-standing. As such, the "corporate culture" of NHY and PSNH is no doubt permeated by this view of the irrationality of emergency planning. Yet, it is from among those who have achieved higher management positions in this very corporation, that the critical positions of the NHY-ORO are to be filled. The extent and scope of this corporate anti-planning attitude

disqualifies any manager of that corporation from a position of responsibility for creating, staffing, training or maintaining an adequate emergency response organization.

B. Emergency preparedness must be maintained throughout the operating life of a reactor. In light of the corporate attitude and policy toward the need for such planning and the considered disregard of the "lessons learned" from TMI, the utility in this case simply cannot be trusted to adequately staff, maintain and fund an adequate level of emergency preparedness. There is neither financial incentive nor corporate commitment nor public obligation that would motivate the utility in this case to maintain an adequate level of emergency preparedness. Only the blunt pressure of regulation would be exerted on the side of public health and safety. However, the scope and extent of emergency planning detail involving as it does hundreds of matters not within the normal purview of the NRC in addition to a limited regulatory review process, make it unlikely that over time, an adequate level of emergency preparedness could be assured.

## C. COMMUNICATIONS

### Communications Systems and Hardware

CONTENTION 12: Communication systems relied on for the mobilization of ORO personnel and the activation of the EOC are not adequate because no back-up personnel will be contacted by these systems and critical positions are filled with only one designated person per shift.

BASIS: All Stage 1 personnel, including the Offsite Response Director, his three Assistants and the Radiological Health Advisor, are contacted by the ORO pager system. However, the personnel not scheduled to be on shift will not have their pagers on. As a result, no plan exists for contacting these personnel. See Plan 3.2-4, Pro-2.1, and Appendix G. All Stage 2 personnel are to be contacted by the Melita Emergency Telenotification System ("METS"). Plan 3.2-4 and Plan 4.4-1. However, this system is programmed to call only those personnel identified as available per shift. As a result, because there are also no back-up personnel at critical positions of the ORO for Stage 2, there is no assurance that the ORO will be mobilized. See Appendix H, pages H-26 through H-55.

CONTENTION 13: The SPMC fails to meet the standards set forth in 10 CFR Part 50, Appendix E, IV.E.9 and 50.47(b)(6) and (8) because there is no indication that the off-site

communication systems relied upon for emergency communications with emergency response personnel have a back-up power source.

CONTENTION 14: The SPMC relies too heavily on commercial telephone links for critical and essential emergency communications. Because commercial telephone lines will be and should be assumed to be overloaded shortly after the onset of an accident at Seabrook, no essential emergency communications should be based in the first instance on commercial telephone communications. All of the liaison activities, all of the communications between contracted-for service providers and their personnel, most of the ORO to government communications and even elements of the notification of the public rely on the availability of commercial telephone lines. As such the SPMC fails to meet the planning standards set forth at 50.47 (b)(6) and planning guidance of NUREG 0654 1.1 F.

CONTENTION 15: The SPMC fails to meet the standards of 50.47 (b)(6) because there is no provision for an effective horizontal or lateral network of communications directly linking emergency field personnel with each other. As a result, all communications must be first vertically transmitted, processed and recommunicated leading to delay, miscommunication and gaps in the communications network. The failure to provide a lateral communications system is a defect in the SPMC which will affect traffic management and



evacuation, security, timely response to emergencies-within-the emergency and otherwise result in a wooden and ineffective emergency response. See Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1), LBP-88-2 at 50 et seq. (February 1, 1988).

CONTENTION 16: The SPMC fails to meet the planning standards set forth at 10 CFR Part 50, Appendix E, IV, E. c., 50.47 (b)(6) and NUREG 0654, II.F.1 (Supp.1), because there is no provision for adequate communications with State and local response organizations or EOCs, or with other private response organizations.

BASIS:

A. The ORO has attempted but failed to obtain FCC approval for its use of emergency radio frequencies also used by State and local government agencies. In the absence of such approval and access to these frequencies, no adequate communications with State and local response organizations exists.

EBS and Its Activation

CONTENTION 17: The SPMC states that ORO "can direct activation" of the EBS but that authorization to broadcast an EBS message must be given by the Governor of Massachusetts. Plan § 3.7. The SPMC, therefore, proposes that ORO will advise

the public through the EBS system upon authorization of the Massachusetts Governor. Pro-2.13. This arrangement is alien to the purposes and design of the EBS.

The EBS exists to provide government officials with direct access to broadcasting capabilities in times of crisis. Because the public needs and expects official guidance in emergency situations, it is extremely unlikely that the Massachusetts Governor would abdicate his duty to notify the public in the event of a radiological emergency. Emergency notification responsibilities, as exercised through the EBS, are at the heart of the state's police power and are therefore inappropriate for delegation to a private third party.

Further, Federal EBS regulations and the Massachusetts EBS Operational Plan ("Operational Plan"), which governs operation of the EBS in Massachusetts, makes no provision for third party activation as envisioned by the drafters of the SPMC. Rather, such provisions were designed to provide solely for government activation. Absent amendment of the Operational Plan to expressly provide for authorization of ORO, activation by parties other than the government officials expressly named in the Massachusetts Operational Plan is therefore inconsistent with both Federal and State EBS design. The plan, therefore, inadequately provides for notification through the EBS system and does not meet the planning standards set forth at 50.47 (b)(5) and (7) and the planning guidance of NUREG 0654, II.E.5.

BASIS:

A. The Operational Plan provides that the EBS may be activated at the request of authorized government officials, viz., the Governor, the Director of the Massachusetts Civil Defense Agency, the Massachusetts State Police and the National Weather Service. Operational Plan at V.B.2. and "Definitions". Further, the Operational Plan provides that requests for activation by government officials "shall be made directly" to the appropriate station. Id. No Provision exists for the delegation of such authority to private parties. Thus, since activation must be accomplished through direct contact by government officials, ORO lacks legal authority to activate the EBS system. ORO may obtain the legal authority to activate only through an amendment to the Operational Plan expressly providing for such an arrangement.

B. The expectation that the Governor of Massachusetts would authorize ORO, a private third party, to activate the EBS is extremely unrealistic. Central to the State's police power is its ability to protect public health in crisis situations. Delegation of this inherent government function would border on an abdication of governmental responsibility. The likelihood of the **Massachusetts** Governor delegating this authority to ORO, a private, non-resident third party, is, therefore, highly improbable.

C. Assuming, arguendo, that ORO possessed authority to activate the EBS system, insufficient provisions exist for

verification of the Massachusetts Governor's authorization of ORO to activate the EBS. For example, no procedure provides that a government official will contact the EBS station to verify authorization. Instead, the EBS station must rely entirely on the word of the ORO staff or person purporting to be ORO staff. Thus, activation by only authorized individuals is not assured.

D. Notification by NHY would diminish the effectiveness of public notification. The likelihood of effective and orderly response is enhanced by the public's knowledge that notification flows directly from an official source embodying authority and expertise. Notification by NHY, already the subject of widespread distrust in the surrounding communities, would not carry the same degree of authority. Moreover, NHY has no legal jurisdiction over private individuals whereas the government can communicate over the EBS that certain response actions are required.

E. In notifying the public of an emergency, NHY would have to choose the level of urgency appropriate for public notification in light of the circumstances. NHY has a vested interest in promoting public perception that the plant is safe. Consequently, in the event of a radiological incident, NHY has an interest in minimizing the public perception that the plant is a source of danger. NHY will thus be faced with the conflicting interests of minimizing the public perception of danger and notifying the public in suitably urgent terms.

The Governor of Massachusetts, whose primary interest is public protection, will not be faced with such competing considerations and is therefore the appropriate source of public notification.

F. The plan states that, while the ORO has the ability to activate the EBS, it does not have the authority to broadcast. Plan §§ 3.2.5, 3.7.3. The plan, thus, treats activation and authorization as two separate capabilities. The plan fails, however, to clearly define the difference between activation and authority to broadcast. The plan fails, therefore, to clearly delineate the respective responsibilities of the Governor of Massachusetts and ORO regarding the EBS.

#### Notification of Response Organizations and Workers

CONTENTION 18: The SPMC fails to meet the planning standards set forth at 50.47 (b)(5) and the guidance provided in NUREG 0654, II. E. 1. and 2. because the notification and mobilization of response organizations and personnel is not adequate.

#### BASIS:

A. Appendix G describes the procedures to be followed by the NHY Offsite Response EOC Contact Point in the event of an accident. See also Plan 3.2-1 - 3.2-6. These procedures are far too complicated and time-consuming to be performed effectively by one individual. Yet, notification and

mobilization of the ORO as well as the activation of the public notification system for Massachusetts is totally dependent upon this one individual's actions. There is no indication provided in the SPMC how long it will take before the EOC Contact is relieved of his duties. The only prerequisite for this position is experience as a security guard which is totally inappropriate for this highly stressful, complicated and pivotal position.

B. Key ORO personnel apparently have no car phones or other means of communication during their mobilization period. In light of the distance traveled to get to the EOC by these personnel and the absence of trained and experienced 24-hour staff, this delay means that the ORO may not be functioning during the critical periods of an emergency. No communication links exist at all to the relevant governments or the emergency response personnel except from the EOC.

C. The SPMC provides no adequate means of alerting, notifying and mobilizing key emergency personnel such as bus drivers, ambulance drivers and others. The SPMC simply leaves this function to the contracting employers, but provides no detail on who, how and when such notification will take place. This fails to meet the standard set forth at NUREG 0654, II.E.2.

D. Many of the private organizations and contractors expected to play emergency roles under the SPMC are not themselves notified unless and until those ORO personnel



responsible for such notification are first alerted and mobilized and arrive at the EOC. No procedures exist for back-up assignments in the event ORO personnel with notification responsibilities is delayed or does not arrive.

E. The SPMC fails to provide any procedure or system to ensure that ORO and contract emergency workers receive adequate and timely information about their families. Because no emergency worker tracking system or information center for families of emergency workers is provided, the mobilization times for these individuals will be significantly greater while they check on the safety of their families. See Long Island Lighting Company, (Shoreham Nuclear Power Station, Unit 1), 21 NRC 649, 678-679 (1985).

F. The SPMC makes no provision at all in its notification and mobilization scheme for the communication to the ORO and the contract emergency workers of what Mode of the SPMC is actually being implemented. As a consequence, emergency workers will not know as they mobilize whether ORO or the State and/or the local governments is directing the response and what, if any, preexisting plan is to be implemented.

G. The SPMC provides no assurance that State and local government employees and those providing contract services to the State and local governments (such as snow removal companies, private ambulances, and the like) will be adequately notified of an accident at Seabrook. The SPMC at

Plan 3.2-11 simply asserts that the Massachusetts State Police "undertakes notification of the State Emergency Response Organization and local dispatchers. The local dispatchers notify the local emergency response organizations. The NHY Offsite Response EOC Contact will provide a back-up notification to local dispatchers for an alert or higher emergency classification level."

1. The SPMC references the Massachusetts Radiological Emergency Response Plan in support of a certain state notification sequence. No such State plan exists for the Seabrook EPZ and, therefore, no notification procedure reaching the local areas exists.

2. No functioning continuously staffed local emergency response organizations exist in the Massachusetts towns nor are "local dispatchers" even identified for the benefit of the EOC Contact who is supposed to contact them. See App. G at G-18; App. H, H-83 et seq. If he does contact someone, he is to request on behalf of ORO that the towns "respond to this situation." Such a Zen-like communication hardly qualifies as "notification" of an emergency response organization that the SPMC assumes will play a role in the emergency response. See also 10 CFR Part 50, Appendix E, IV.D.

### Sirens

CONTENTION 19: There is no adequate alerting system for the public in existence or proposed which meets the regulatory

requirements set forth at 50.47 (b)(5); NUREG 0654 II. E.6 and Appendix 3 and FEMA-REP-10. For this reason, there is no reasonable assurance that adequate protective measures can and will be taken. 50.47 (a)(1).

BASIS:

A. No adequate procedures exist to ensure that an activation of the sirens in Massachusetts and New Hampshire is coordinated. The Agreement between New Hampshire and NHY ORO states simply that these parties agree to coordinate without providing any detail on how that will be effected. See App-C at C-1b. The SPMC at Pro-2.13 at 7 and 8 reiterates that coordination with Massachusetts and New Hampshire state officials is desired, but does not describe what this entails. This difficulty is particularly acute because the Public Notification Coordinator is also instructed to complete notification within 15 minutes of authorization from the Governor. No provision or procedure exists, however, to insure that the time in which notification must issue in Massachusetts and New Hampshire is synchronized.

B. No decision criteria exist for ORO personnel to activate and use the mobile sirens in the voice mode. Moreover, the length of the proposed messages and the slow speed at which the mobile vans can actually be used in this mode make such use impossible in a timely manner.

C. No agreement is set forth in the SPMC between the NHY ORO and the Department of Interior ("DOI") providing that

the DOI will notify the public in the Parker River National Wildlife Refuge on Plum Island. But see Plan 3.2-14.

Moreover, the transient population in the summer on this nine mile stretch of beach is large and geographically dispersed. No procedures exist (or could exist) for a timely notification of this population without sirens.

#### Public Notification and Communications

CONTENTION 20: The emergency messages to be utilized by the ORO in the event of an emergency at Seabrook are inadequate and will not be effective in communicating necessary information to the public. As a result, the SPMC does not meet the planning standards set forth at 50.47(b)(1), (5) and (6) and the guidance provided by NUREG 0654 at II E.3, 4, 5, 6, 7 and 8, and F.1.

#### BASIS:

A. The messages prepared by the ORO are overly long, misleading, confusing, self-contradictory, impossible to either broadcast or receive in the time available and ignore important characteristics of the recipient public in Massachusetts and its **response** to a radiological emergency at Seabrook. Moreover, the message set forth as Attachment 2, Pro-2.13 is totally useless and would only disorient and fragment the public response.

B. The SPMC makes no provision and provides no

procedure for coordinating emergency messages with participating and non-participating State and local governments as required by NUREG 0654, II.B.7.d. and Supp. 1, II.E.8.

C. Because of the utility's complete lack of any credibility among the recipient public, messages broadcast by the ORO will not be believed or credited, the public's emergency response will not be primarily shaped by this information, and the ability of the NHY to effectively implement the SPMC will be greatly reduced.

D. Under several SPMC modal scenarios, public messages and information will be broadcast by the State and/or local governments in addition to public broadcast by the ORO. As a result, possibly conflicting information will be communicated to the public. At the very least, the information stemming from ORO will have none of the indicia necessary for it to structure and shape the public's emergency response.

E. The messages do not adequately address the issue of their source and do not explain who and what is controlling and directing the emergency response. There is no discussion in the messages of the emergency relationship between ORO and the state and/or local governments. See NUREG 0654, Supp. 1, II E.7.

F. The SPMC provides no adequate procedures for insuring that the emergency messages broadcast to the public correlate with the messages and information provided to the media by the NY ORO and other officials.

G. The SPMC does not provide any assurance that the messages and communications provided to the public during an emergency will be consistent and coherent. As FEMA stated in April, 1987 in a letter to the NRC from Dave McLoughlin, then Deputy Associate Director of State and Local Programs and Support:

To the extent that utility company officials step into the roles of government officials, such as by recommending specific protective actions, there is a high probability that the public and emergency responders will receive conflicting instructions.

The SPMC does not adequately address this problem.

H. The pre-established messages set forth in the SPMC at Pro-2.13, Attachments 2-24, may be altered or modified by the Public Notification Coordinator. Pro-2.13 at 8. No guidance or training is provided this individual on the essential components of an effective emergency message. As a result, the messages(s) actually broadcast may be less effective than those set forth in the SPMC.

I. The messages set forth in the SPMC do not indicate what "shelter" means, do not provide recommendations concerning ad hoc respiratory protection, do not adequately indicate how to maximize the benefits of sheltering space and provide only brief and unclear hints of the evacuation routes the public should follow. No prerecorded message at all is addressed to the beach populations.



CONTENTION 21: The SPMC fails to provide adequate procedures for the coordinated dissemination of information to the public and fails to sufficiently plan for the role of the news media and, therefore, does not meet the planning standards as set forth at 50.47(b)(8) and NUREG 0654, II G.3.b.4.

BASIS:

A. No provision has been made in the SPMC for the news media at the Emergency Operations Facility ("EOF"). The Media Center is located in the Town Hall, Newington, New Hampshire (Plan 3.7-6) which is three to four miles from the EOF and the EOC (Plan 5.1-2). However, the Public Information Advisor who is responsible for issuing news releases and directing public information activities is located at the EOC and not the Media Center. No adequate procedures for coordinating the activities of the public information staff at the EOC and the personnel at the Media Center are provided. Adequate procedures also do not exist for the coordination of the activities of Media relations representatives who will be communicating directly with the press by telephone.

B. The SPMC has no procedure for dealing with the likely arrival of several hundred members of the news media in the event of an emergency. No procedures are described for access control, communications support, or other back-up facilities in the likely event of a large media response.

CONTENTION 22: The SPMC fails to provide adequate information and access to information at the time of an emergency to those State and local governments which are not participating in emergency planning. While New Hampshire response officials will have access to the Emergency Operations Facility ("EOF") and the Emergency Operations Center ("EOC"), officials from the Commonwealth will not be permitted at these locations (assuming they could be reached in a timely fashion.) As a result, no coordination of response, including coordination of public notification and communication will occur and the planning standards set forth at 50.47(b)(1), (2), (3), (5), (6), (7) and (8) and the corresponding criteria set forth in NUREG 0654 have not been met.

CONTENTION 23: The SPMC provides inadequate procedures for rumor control during an emergency and fails to meet the standards set forth in 50.47(b)(7) and NUREG 0654 II G.4.

BASIS:

A. In the event of an emergency at Seabrook, there may exist several official sources of information, including the State and/or local governments. No provision is made for the coordination of rumor control efforts by these sources. Without a centralized source of information, no rumor control will be effective.

B. The ORO itself will be unable to provide coordinated rumor control. The SPMC provides that the Public

Information Advisor shall designate at the time of an emergency a rumor control staff, and appoint a lead to assign responsibilities, including briefing the staff on the Rumor Control Policy Guide. Pro-2.12 at 5.1.4. The Public Information Advisor is to develop a strategy for responding to incorrect media broadcasts and persistent public inquiries. Pro-2.12 at 5.1.10. The midst of an emergency is not the time to set up the rumor control structure or to develop strategies for response to rumors.

C. The Rumor Control Policy Guide (Pro-2.12, Attachment 1) mandates that only the Public Information Coordinator or individuals he designates are to discuss the emergency with the media at news briefings. The instructions to the Public Instruction Coordinator (Pro-2.12 at 5.3.10) direct that person only to "participate" in news briefings. Media briefings are one of the key tools to be used in keeping the public informed and thereby controlling rumors. These briefings should involve full use of experts and visual and graphic aids to convey technical information in an understandable manner. The SPMC does not provide for such an approach.

D. The SPMC assigns public information personnel responsibilities without any guidance as to the manner in which those responsibilities are to be carried out. Information can not be effectively communicated to the public unless public information staff are fully informed of developments and have

access to technical experts capable of addressing areas of uncertainty. Any plan which does not recognize the public's extraordinary appetite for information, and does not specifically assign a role in information preparation and dissemination to technicians and experts is inadequate.

CONTENTION 24: The information to be made available to the public pursuant to the SPMC prior to an emergency does not meet the regulatory standards as set forth at 50.47 (b)(7), NUREG 0654 II. G. and 10 CFR Part 50, Appendix E, IV. D.2.

BASIS:

A. Plans and procedures for disseminating pre-emergency information is inadequate. There is no assurance that the many thousands of transients who frequent the Massachusetts portions of the Seabrook EPZ will have available to them either prior to or at the time of an emergency any information concerning the methods and times required for notification, the protective actions planned, the nature and effects of radiation or a list of sources of additional information.

B. Dissemination of information to farmers outside the 10-mile plume exposure EPZ but within the 50-mile ingestion pathway EPZ is deferred until the time of an emergency and no procedure is established for how such information would be distributed at such time. Plan 3.7-3, -4.

C. Inadequate provisions have been made to insure

that the special needs population receive necessary pre-emergency information.

D. The content of the pre-emergency information made available to the public is not adequate and does not meet regulatory requirements.

1. The information is not adequately presented to the reader as important emergency information that should be retained.

2. The discussion of the health risks of radiation is inadequate and will confuse the reader as to the need for and proper circumstances of emergency response. The information fails to state or indicate that radiation can be harmful and life-threatening and that a release of radiation would be and should be considered an emergency.

3. The discussion of the risks of an emergency at Seabrook Station is purposefully misleading and will confuse the reader as to the need for and proper circumstances of emergency response.

4. The information to be provided to the public contains factually inaccurate material, misleading information, and informational puffery more appropriate to advertising copy.

5. The information contains confusing and contradictory statements concerning protective measures that might be recommended.

6. The public is not informed about the lack of participation in emergency planning by the State and local

governments and the basis for that non-participation. No adequate discussion is presented concerning the ORO and the nature of the SPMC as a utility plan, and the relationship(s) during an emergency between the ORO and State and local governments.

7. Inadequate information is provided to parents regarding procedures to be employed in the event of an evacuation of school children.

8. Inadequate information is provided with respect to "How To Take Shelter." The information fails to instruct people to seek shelter in basements or the lowest level possible, and in rooms with the fewest number of doors and windows. Inadequate and inappropriate information is provided with respect to respiratory protection.

9. Inappropriate information is provided with respect to pets. Most pet owners would be unwilling to leave their pets at home in the event of a radiological emergency and therefore might be discouraged from reporting to reception centers if accompanied by a pet, even when they are instructed to do so for monitoring and decontamination. The information also fails to inform pet owners that they could be gone from their homes for at least several days or weeks, or even indefinitely.



D. PROTECTIVE MEASURES

CONTENTION 25: In light of the absence of State and local participation in emergency planning for the Seabrook station, the plume exposure EPZ defined by the SPMC to include only the 6 Massachusetts towns of Salisbury, Newbury, West Newbury, Newburyport, Amesbury and Merrimac is not large enough to provide reasonable assurance as required by 50.47(a)(1).

BASIS:

A. Portions of the towns of Haverhill and Rowley lie within the 10-mile radius of Seabrook station but are not considered by the SPMC.

B. 10 CFR 50.47(c)(2) requires that the "exact size and configuration of the EPZs surrounding a particular nuclear power reactor shall be determined in relation to local emergency response needs and capabilities . . . ." In light of the non-participation of the Commonwealth in emergency planning for the Seabrook station, the planning efforts of the utility should be extended into the contiguous areas to insure that effective emergency response would be possible there. The utility's planning effort does not provide a reasonable basis for assuming that emergency response efforts can or will be extended into those areas in the event it is necessary to do so under emergency conditions. No actual prior planning exists between the ORO and the local governments or agencies either within or outside the SPMC's EPZ.

CONTENTION 26: The SPMC fails to provide a range of protective actions for the public within the Seabrook plume exposure EPZ. No choice of protective actions is set forth in the SPMC for large numbers of people. Thus, the SPMC does not meet the standards set forth at 50.47(b)(10) and NUREG 0654 II.J.9, 10.m. and does not provide reasonable assurance that adequate protective measures can and will be taken. 50.47(a)(1).

BASIS:

A. The SPMC does not provide an alternative to evacuation for the beach areas in the Massachusetts portions of the EPZ. Evacuation alone does not constitute a range of protective measures. Secondary mitigating measures, including decontamination, are not protective "measures" or "actions" under 50.47(b)(10). In fact, the Commission itself has identified "appropriate protective measures" as evacuation or sheltering. 10 C.F.R. § 100.3(b).

B. In the absence of sheltering for the transient beach populations, the SPMC does not provide adequate protective measures under 50.47(a)(1) because for all fast-paced serious accidents that produce offsite consequences in less time than the transient beach populations can effect an evacuation, those populations have no adequate protection from severe radiological doses. Substantial portions of the beach population are entrapped by the traffic congestion generated by an order to evacuate and cannot remove themselves from areas close-in to the plant for many hours.

## SHELTERING

CONTENTION 27: The SPMC's decision-making criteria for selecting a sheltering as opposed to an evacuation PAR is inadequate and inaccurate, and, therefore, fails to meet the planning standards set forth at 50.47(b)(10) and NUREG 0654 II.J.10.m. and Appendix E, IV, A.4. As a result, the SPMC fails to provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. 50.47(a)(1).

### BASIS:

A. There is no study presented in the SPMC setting forth the time required for effecting a sheltering PAR for various sectors of the plume exposure EPZ and for various populations in the EPZ as required by 10 CFR Part 50, Appendix E, Part IV. The effectiveness of sheltering as a dose reduction strategy is significantly influenced by the time required to implement a sheltering response. (See D. Aldrich, D. Ericoso, and J. Johnson, Public Protection Strategies for Potential Nuclear Reactor Accidents: Sheltering Concepts with Existing Public and Private Structures, SAND77-1725, Feb. 1978, at 13). Therefore, decision criteria must include the time required for the various segments of the population to implement a sheltering PAR.

B. The SPMC's decision-making criteria calculates a wholebody shelter dose based on a shelter protection factor of .9. According to the 1970 U.S. Housing Census, approximately 93% of the year-round housing units in Massachusetts have basements (SAND 77-1725, App. C, Table C1), which would afford shielding factors of .6 for cloudshine and .05 for groundshine. Therefore, the SPMC's decision criteria are inaccurate and could result in decisions to evacuate the population when a sheltering PAR would afford greater dose reduction.

C. The SPMC's decision criteria do not adequately consider dose from groundshine in determining whether to evacuate or shelter the population. The decision criteria do not adequately consider the shielding factor for groundshine afforded by shelters in the Massachusetts EPZ, and do not adequately consider the skin and car deposition doses that persons sitting in cars while waiting to evacuate could receive if, due to traffic congestion, they are unable to evacuate the area prior to plume arrival.

D. The formula used in the SPMC's decision criteria for calculating thyroid shelter dose assumes an air exchange rate that is too high for the predominantly winterized structures that would serve as shelters in the Massachusetts EPZ, and, therefore, inaccurately calculates projected thyroid dose.

E. The decision criteria fails to account for exposures from inhalation other than thyroid exposure.

CONTENTION 28: The SPMC fails to meet the planning standard set forth at 50.47(b)(10) and NUREG 0654 II.J.10.m. because the decision criteria for PARs ignore a significant special population. The SPMC fails to take into account the significant number of persons who reside in trailers located throughout the Massachusetts plume exposure EPZ. These trailers would provide only minimal shielding from radiation (significantly less shielding than would be provided by the typical house in the Massachusetts EPZ), and therefore special consideration must be given to residents of these trailers in PAR decision-making, such as ordering them to evacuate or to seek shelter elsewhere when other persons in their municipality are ordered to shelter.

## Evacuation

CONTENTION 29: Because the residents of the six Massachusetts EPZ communities have so little confidence in and so much hostility toward the owners of Seabrook Station and the NRC, any and all efforts by the ORO during an emergency to provide the public with information, to direct traffic, or to provide transportation will generate a confused, disorderly, and uncontrolled public response. Thus, the SPMC cannot meet the requirements of 10 CFR § 50.47(a)(1), § 50.47(b)(10), and NUREG 0654, Rev. 1, Supp. 1, Section II.J.

### BASIS:

A. The great majority of the population in the six communities within the Massachusetts portion of the EPZ have a deep, profound and hostile distrust, developed over a long period of time, for the owners and operators of Seabrook Station and for the NRC. As a result, the public simply will not believe any information provided to it during an actual emergency if it perceives that the source of that information is the NRC, the owners of Seabrook Station or anyone affiliated with the NRC or the owners. The SPMC contains a variety of prerecorded emergency and public advisory messages which appear to originate from New Hampshire Yankee, an organization the public knows to be affiliated with the owners of Seabrook Station. See Pro-2.13, Attachments 18-21, pp. 48-51. If these messages, or any like them, are broadcast during an emergency, the public will engage in a confused, disorderly, uncontrolled and ad hoc response.



B. Because of the public hostility and distrust described above, motorists will disregard all efforts by the ORO's traffic guides to direct an orderly evacuation. Even if those guides were somehow lawfully authorized to direct traffic, the public would either not be aware of this fact or disbelieve it. An uncontrolled, ad hoc vehicular evacuation will likely result.

C. Because of the public hostility and distrust described above, those in charge of schools, day care centers, nursing homes and other special facilities, and the special needs/transit-dependent population who reside in their own homes, will not trust or rely upon an ORO worker who calls offering to provide transportation assistance. Schools and day care centers will have parents pick up children if the normal transportation provider cannot respond rather than rely on ORO's assurances that ORO buses will come and do so in a timely fashion. Nursing homes, rather than preparing residents to be evacuated by ORO transport vehicles, will likely seek to shelter their patients or take other ad hoc actions. Those who are at home and need transport assistance will not trust ORO representations concerning bus routes or availability and will seek other help.

D. During an emergency the press, in response to public demand for information from credible sources unaffiliated with the plant owners or the NRC, will seek out and report a myriad of ad hoc comments, analyses, and suggestions from the scientific community and State and local

officials. These reports will overwhelm all efforts by the owners and the NRC to control the flow of public information and will generate an ad hoc, uncontrolled public response.

CONTENTION 30: There is no assurance that snow removal will occur promptly enough or be sufficiently effective to enable an evacuation to be feasible in adverse winter weather. Therefore, the SPMC fails to meet the requirements of 10 C.F.R. 50.47(a), 50.47(b)(10), and NUREG 0654, Rev. 1, Supp. 1, Section II.J.10.

BASIS: The one snow removal company listed as available in the Emergency Resource Manual, App-M, has indicated that it has committed itself only to remove snow at the Staging Area. There is no provision in the SPMC regarding who is to remove snow from the local streets, state highways, and interstate highways in the six Massachusetts communities. In the absence of State or local community response plans for an emergency at Seabrook Station, there is no reasonable assurance that the Commonwealth of Massachusetts or local communities can or will clear the roads of snow. These communities generally rely on private contractors for snow removal, but there is no assurance that private snow removal companies will continue to provide services for roads and highways in the EPZ during a radiological emergency. Thus, given the heavy snowfalls that this area experiences with some regularity during the winter,

there is no reasonable assurance that an evacuation of the six Massachusetts EPZ communities (and those significant portions of the NH EPZ population that evacuate using highways or interstate in Massachusetts for at least some part of their trip out of the EPZ) is feasible in adverse winter weather.

CONTENTION 31: The SPMC, in conjunction with the NHRERP, allows and encourages decision-makers to call for an evacuation of EPZ by sectors (S, SW, NE, SE, N), even within 5 miles, depending on which way the wind is blowing. This is a deficiency in violation of 10 C.F.R. 50.47(a)(1), 50.47(b)(10), and NUREG 0654, Rev. 1, Supp. 1, Section II.J.

BASIS: Because wind-shifts in the area of the plant are so frequent, and because the phenomena of seabreezes at this site makes actual direction of plume travel difficult to predict, if an evacuation is required for any segment, there should always be a 360° evacuation out to the distance necessary. The sudden 180° wind shift during the course of a serious hazardous materials fire at Seabrook, New Hampshire in March 1988 demonstrates the folly of evacuating by sectors rather than by 360° increments. Instead, the SPMC's procedures direct decision-makers first to determine the wind direction and, if conditions warrant an evacuation, to evacuate (beyond two miles) only the downwind sectors. See IP 2.5, Attachments 1, 2, 3 and 6. For this plant site, the normal potential results of high and low wind speeds as shown on Attachment 6 to IP 2.5 simply are not reliable.

CONTENTION 32: There is no evacuation time estimate study which has been done to assess what the realistic evacuation times would be in the Massachusetts portion of the EPZ in light of the special difficulties, circumstances, and delays in conducting an evacuation in Massachusetts under the SPMC. The Final Report of the KLD Evacuation Time Estimate Study and Traffic Management Plan Update, completed in August 1986, did not take into account these special circumstances, difficulties, and delays. A new evacuation time estimate study needs to be conducted before the SPMC can meet the requirements of 10 C.F.R. 50.47(a)(1), 50.47(b)(10), NUREG 0654, Rev. 1, Supp. 1, Section II.J.10.e, and Appendix 4 of NUREG 0654, Rev. 1.

BASIS: While reference is made at various points in the SPMC to the KLD Evacuation Time Study of August 12, 1986, there is no specific averment that the evacuation times listed in the SPMC came from that report. See Pro-2.5, Attachment 4. In fact, the actual ETES listed in Pro-2.5, Attachment 4, are not listed in the KLD study. It may be that further ETE analyses were done. If so, this additional work and the assumptions and methods of calculation used have not been described. Such work needs to be disclosed and assessed to determine whether it qualifies as an ETE study for the SPMC and adequately takes into account all the relevant conditions affecting ETES in the context of the SPMC and the expected response of State and

local officials when an evacuation is selected as a protective action for some or all of the six (6) Massachusetts communities.

In the alternative, it may be that no further analysis was done after the publication of the KLD ETE study in August 1986. Instead, ETEs for the SPMC may have simply been extrapolated (without any further analysis) from old KLD computer runs done prior to August 1986. Such ETEs, however, could not have taken into account the existence of the utility plan, the lack of fixed sirens in Massachusetts, and the uncertain response by State and local officials. Extrapolating ETEs from old 1986 KLD computer runs which were not based on assumptions about the likely conditions obtaining in Massachusetts does not constitute a good faith attempt to conduct an ETE study for the Massachusetts EPZ communities. As the Appeal Board in Zimmer noted, time estimates are "to be determined on a case-by-case basis upon consideration of all relevant conditions prevailing in the specific locality." Cincinatti Gas & Electric Company (Wm. H. Zimmer Nuclear Power Station, Unit No. 1), ALAB-727, 17 NRC 760, 770 (1983) (emphasis supplied).

The old KLD ETE study simply did not take into account the many effects that result from an evacuation conducted under the SPMC. For example, the KLD study utilized a "planning basis" which assumed that as a precautionary action the public would be notified by loud speakers to clear the beaches at the Alert

Level and that an order to evacuate would be transmitted to the public 25 minutes later. NHRERP, Vol. 6, 4-1. Given that the SPMC does not utilize early beach closing, that there are no longer any pole-mounted loud-speakers or sirens in the six Massachusetts communities, and that communication delays will inevitably result as ORO communicates a PAR to Massachusetts officials and waits for the response, this "planning basis" is inappropriate for generating realistic ETEs for Massachusetts. The KLD study also assumed use of a specific traffic management plan, but Massachusetts officials have rejected the use of that plan. In Amendment 3, almost all the TCP and ACP diagrams have been withdrawn from the SPMC. Cf. Amendment 2, App. J with Amend. 3, App. J. Any changes in the configuration of these posts will result in different ETEs. The KLD study also assumed that all traffic control posts would be immediately staffed at the time of an evacuation. This assumption is not realistic for a fast-breaking accident under the SPMC. The SPMC fails to meet the requirement that an evacuation time study be done on a case-by-case basis and that the study consider all relevant conditions. Piggybacking on the old KLD study is not sufficient to meet that requirement in light of the changed circumstances. A new study needs to be conducted.

CONTENTION 33: Even if there were an appropriate ETE study accompanying the SPMC, the SPMC's procedures do not instruct ORO workers to refer to it at all, let alone describe how to



use it to adjust an ETE contained in the table in Attachment 4 of IP 2.5. Absent such procedures, the SPMC fails to assure that the ETEs used by protective action decision-makers can or will be adequately adjusted to account for road conditions, transient population fluctuations, road impediments, weather, delays in staffing traffic control or access control points, or other special evacuation problems that vary from the conditions assumed when the ETEs in the SPMC were calculated. The SPMC therefore fails to comply with 10 C.F.R. 50.47(a)(1), 50.47(b)(10), and NUREG 0654, Rev. 1, Supp. 1, Section II.J.10.

BASIS: The ETEs to be referenced in the SPMC are those found in Pro-2.5, Attachment 4. There is no indication on Attachment 4 where the times presented came from, who calculated them, how they were calculated, or what their sensitivities are. Pro-2.5 and Attachment 4 are to be used by the Accident Assessment Coordinator in completing the Protective Action Recommendation Worksheet (Attachment 3). Pro. 2.5, § 5.3.1.B instructs him to "[s]elect the appropriate estimated evacuation time from Attachment 4 for Item 8 [worksheet]. If unsure of which scenario to select, consult with Radiological Health Advisor." When one reviews the Implementing Procedures for the Radiological Health Advisor at Pro-2.5, §§ 5.2.3 and 5.2.4, however, one finds no reference to providing this function. Instead, he is instructed to "[r]eview the completed [sic] Attachment 4 Estimated Evacuation Times for the Massachusetts Communities." § 5.2.3. He is also

instructed to "[c]onfer with the Assistant Offsite Response Director, Response Implementation." In Attachment 1 of Pro-1.3 we find that it is the Assistant Offsite Response Director for Response Implementation who is to "evaluate constraints to the Evacuation Time Estimate (ETE) (e.g., road conditions, current weather conditions and special evacuation problems)." However, the Implementing Procedures for this position in Pro-2.5 do not specify how and to what extent evacuation constraints should affect ETEs. Thus, nowhere in the SPMC is there a procedure which specifically directs anyone in the ORO to refer to any ETE study to assess the accuracy of an ETE in Attachment 4 of IP 2.5 in light of such variables as road conditions, weather, delays in implementing traffic control or access control, or road blockages. IP 2.5 does contain a section (6.0) labeled "References." The last item listed in this section is the "Seabrook Station Evacuation Time Study, August 12, 1986, KLD Associates, Inc." Simply listing this ETE study as a reference, however, provides no reasonable assurance that it will be located when needed, that it will be referred to at all when needed, or that if it is referred to it will be used correctly.

CONTENTION 34: There is no reasonable assurance that there are sufficient resources available to provide gasoline to hundreds of vehicles which are likely to run out of gas during an evacuation from the EPZ. Absent these resources, the SPMC

does not meet the standards set forth at 50.47(b)(10) and NUREG 0654, Supp. 1, II.J.9 and 10.g.

BASIS: During a summertime evacuation from the beach areas when the beaches are crowded, the traffic queues will be so long and slow moving that many vehicles will run out of fuel before exiting the EPZ. Fuel use could be substantial for vehicles using air conditioning units. Other vehicles could easily expend gallons of fuel while idling or creeping along in congested flow traffic for the extended periods that it will take to exit the EPZ. There is no reasonable assurance that any gas stations at all will be open during an evacuation. Yet the SPMC provides no workable mechanism to provide fuel to the hundreds or perhaps even thousands of vehicles that could run out of fuel during an emergency. There is no reasonable assurance that ride-sharing will be available for use by those stranded without fuel. Because the SPMC is not capable of maintaining two-way flow on the beach area roads, buses traveling the bus routes will not be able to get into the beach areas to pick up those who are stranded.

CONTENTION 35: If an evacuation is required on hot summer days when the beaches are crowded, the SPMC provides no contingencies for those thousands of beach area evacuees whose vehicles can reasonably be anticipated to overheat and stall as they proceed along the congested beach area roads at the rate

of about one car length per minute in weather that may well exceed 90°. The plans do not provide sufficient tow vehicles to adequately respond to this problem. It is unrealistic and imprudent to rely on ride-sharing to resolve a problem of this magnitude. For those whose vehicles will stall, there is no reasonable assurance that they will have a means of evacuation. Therefore, the SPMC does not meet the requirements of 10 CFR § 50.47(a)(1), § 50.47(b)(10), or NUREG 0654, Rev. 1, Supp. 1, II.J.

BASIS: Reasonable estimates of the number of vehicles which may overheat and stall under the conditions that may well exist during a summertime evacuation run into the hundreds. These vehicles could contain up to a few thousand individuals. Because none of the towing companies listed in the SPMC can be relied upon during an emergency, tow trucks do not provide an answer to this problem. Even if they were available, two-way flow will not be maintained on the beach evacuation roads. As a result, tow trucks will not be able to reach most of these vehicles, nor will buses. Ride sharing will not be a wide-spread phenomenon in the beach areas during an evacuation, as people in cars will be moving more slowly than people walking.

CONTENTION 36: There is no reasonable assurance that a vehicular evacuation, the only protective action utilized by the SPMC to protect those in the Massachusetts beach areas,

will be feasible on summer days when the beaches are crowded. The SPMC therefore does not meet the requirements of 10 CFR § 50.47(a)(1), § 50.47(b)(10), NUREG 0654, Rev. 1, Supp.1, Section II.J. and NUREG 0654, Appendix 4.

BASIS:

A. The traffic congestion that will result from an attempted evacuation will be so massive that gridlock will likely occur, preventing a vehicular evacuation for a majority of the beach area population.

B. Occupants of thousands of cars will grow so frustrated with the extent and duration of the traffic jams, and so anxious about their safety, that they will likely abandon their cars and seek to walk or run as fast as they can, which will be faster than cars on the roads will be moving.

C. Evacuation delays will be so extended that many members of the public waiting to evacuate and unable to do so will become contaminated. The resulting radiation sickness among evacuees will itself cause serious further delays and driver difficulties and will make vehicular evacuation impossible.

D. So many vehicles will overheat or run out of gas that thousands of those in the beach areas will not be able to complete a vehicular evacuation. The SPMC does not provide sufficient resources to provide gasoline and other road services for these vehicles.

E. Driver disorderliness will be so great that many disabling accidents will likely occur which create road blockages. Because of the inadequate system of surveillance for road blockages contained in the SPMC, most of these blockages will not be noticed by those dispatching tow trucks. Because of the traffic congestion and the inability to maintain two-way flow on Rts. 1A and Rt. 286, many tow trucks which are dispatched will not be able to get into the beach area to remove them.

F. At a critical point during the height of the evacuation effort, enough cars will litter the roads, and enough people will abandon their vehicles and walk out faster than those in vehicles are moving, that a spontaneous "crowd reaction" phenomenon will occur: in which, in a very short period of time, all or almost all of those remaining in their vehicles will abandon their cars and proceed on foot. Of course, there will be a number of passengers who, due to physical handicap, age, or other physical infirmity, will be unable to proceed on foot and will therefore become entrapped in the EPZ by the numbers of abandoned vehicles.

G. The SPMC does not account for or make any provision for the population evacuating by foot, and there is no reasonable assurance that an evacuation by foot would result in any or adequate protection from radiation exposure.



CONTENTION 37: The evacuation plan contained in the SPMC is so poorly designed and so inadequately staffed that, even if State and local officials are assumed to make a best efforts response, there is no reasonable assurance that either the permanent residents or the beach area transients can or will be evacuated significantly faster than can be achieved by an uncontrolled evacuation. Thus, the SPMC will not achieve any reasonable or feasible dose reduction through evacuation. With additional manpower and intelligent plan revisions some feasible dose reduction could be achieved. But even then the SPMC could not obtain either reasonable dose reductions or reductions which are generally comparable to what might be accomplished with full Massachusetts governmental cooperation. Thus, the SPMC does not provide reasonable assurance that adequate protective measures can and will be taken, and it fails to comply with 10 CFR 50.47(a)(1), 50.47(b)(10), 50.47(c)(1), and NUREG 0654, Rev. 1, Supp. 1, Section II.J.

BASIS:

A. The number of traffic control personnel relied upon by the SPMC to facilitate traffic flow is inadequate to achieve a traffic flow rate that is significantly faster than can be achieved by an uncontrolled evacuation. Massachusetts, if participating in the planning process, would endeavor to utilize more than double the number of traffic guides provided in the SPMC to facilitate traffic flow.

B. Insufficient capacity-enhancing measures and other poorly conceived traffic control strategies are utilized by the SPMC's traffic management plan. See Appendix J. As a result, the SPMC cannot achieve an evacuation of the Massachusetts EPZ areas significantly faster than can be achieved by an uncontrolled evacuation. Massachusetts, if it were participating in the planning process, would utilize more than twice as many traffic control posts to enhance roadway capacity, would seek to utilize both lanes of Rt. 1A for evacuating vehicles heading west out of Salisbury Beach, and would make a variety of road and sign improvements to facilitate traffic flow away from the beaches.

C. The traffic control diagrams contained in the plans are the key to ensuring that traffic control personnel, whoever they are, will implement the SPMC's evacuation plan strategies correctly. The SPMC's diagrams, however, are poorly conceived, ambiguous, often error-filled, and there is no reasonable assurance that in attempting to implement the plan the traffic control personnel (whether they are ORO workers, State and local traffic control professionals acting alone, or State/local traffic controllers accompanied by utility company employees) will not actually impede traffic flow rather than enhance it. The likely result of the use of these diagrams is that an SPMC evacuation will take longer than an uncontrolled evacuation would take. Thus, it is likely that this traffic management plan will increase those consequences, not reduce them.

CONTENTION 38: There are inadequate traffic control personnel assigned along heavily travelled evacuation routes, especially Rt. 1A and Rt. 286 in Salisbury and the Plum Island Turnpike in Newbury and Newburyport, to ensure that two-way traffic flow can be maintained on these roads during an evacuation of the Massachusetts beach areas when the beaches are crowded, as required by the SPMC. Thus, there is no assurance that the SPMC's evacuation plan can or will be implemented to permit inbound returning commuters, emergency vehicles, tow trucks, or buses to use these roads.

BASIS: During the evacuation process, when traffic congestion in the beach areas forces traffic to back up in long, very slow moving traffic queues, many evacuating drivers will be too impatient to stay in line in the right hand lane and will cross over into the opposite lane in order to drive more rapidly. The SPMC does not have enough traffic control personnel assigned along the heavily used evacuation roads to maintain two-way flow. The personnel are too far apart and too few in number. This will prevent returning commuters, emergency vehicles, tow trucks and buses from traveling inbound on these roads.

Introduction to Contention 39: The evacuation time estimates contained in the SPMC, Pro-2.5, Attachment 4, are different from the ETES that are contained in Volume 6 of the

NHRERP, and their accuracy cannot be presumed to have been litigated during the course of the NHRERP litigation. In the NHRERP litigation, the issues litigated concerned whether the Volume 6 ETEs were accurate for the New Hampshire towns in the EPZ. Contentions which sought to introduce Massachusetts issues were excluded. Now the questions to be resolved concern whether a separate set of ETEs for the Massachusetts communities are realistic. While the specific issues to be examined parallel closely those addressed in the NHRERP litigation, they nevertheless need to be examined in the context of an SPMC evacuation in Massachusetts. For example, in assessing how accurate the NHRERP's ETEs were for New Hampshire, one important issue concerned the late-staffing of New Hampshire traffic control posts by the New Hampshire State Police. Specific testimony was received regarding how fast the NH State Police might be able to respond and what impact this would have on New Hampshire ETEs. Similar issues are confronted in assessing the SPMC's ETEs for Massachusetts: How quickly can OROs traffic and access control guides staff their posts? How quickly will State/local responders do so if ORO's workers are not authorized? What effect will these staffing delays have on ETEs in Massachusetts?

CONTENTION 39: The evacuation time estimates contained in the SPMC, Pro-2.5 at Attachment 4, are too unrealistic to form the basis of adequate protective action decision-making.

Realistic ETES would be much longer. The SPMC, therefore, does not meet the requirements of 10 CFR § 50.47(a)(1), § 50.47(b)(10), NUREG 0654, Rev. 1, Supp. 1, II.J.10.1, and NUREG 0654, Appendix 4.

BASIS:

A. The ETES in the SPMC are based on an estimate of the maximum size of the Massachusetts beach area vehicle population which is significantly too low.

B. The ETES are based on the calculations of a computer model which fails to recognize the full extent of time delays which will be caused by the additional traffic congestion generated by the thousands of vehicle trips being taken by returning commuters and parents picking up school children. These trips are not modeled at all, nor are their effects properly accounted for in any other way.

C. The ETES are based on the implicit assumption that the number of traffic control personnel provided by the plans will be adequate to ensure an orderly evacuation. This assumption is simply not true. Many additional traffic control personnel are needed both at locations targeted in the plans and at other locations to ensure the orderly and efficient traffic flow on which the computer model's ETE calculations were based.

D. The ETES are based on the unrealistic assumption that the traffic control personnel will be able to staff their

posts in a timely manner and will be at their posts upon the initiation of an Order to Evacuate.

E. The ETES are based on the unsupported assumption that traffic and access control personnel will in fact show up. In fact, many ORO personnel, most of whom are private utility company employees, will not show up at all to stand, if necessary, in a radioactive plume and/or on ground which is contaminated with radioactivity in order to assist with an evacuation from the six Massachusetts communities.

F. The ETES fail entirely to take into account the delays that must be expected to result from drivers and their passengers becoming ill from the radiation to which they can reasonably be expected to be exposed for a wide range of accident sequences.

G. The ETES are based on an unrealistically low estimate of the number of vehicles which the permanent residents will use to evacuate because: 1) the population of the six Massachusetts communities is larger than was assumed; and 2) the average number of people per evacuating car will in fact be lower than was assumed.

H. The ETES are based on unrealistic assumptions about the "signal timings" that will be achieved during an evacuation at intersections which experience competing traffic flow demands.

I. The ETES are based on the unrealistic assumption that evacuation times will not be delayed at all by traffic accidents or disabled vehicles. This assumption is unrealistic because:



1. Many more accidents and disabled vehicles will occur than assumed.

2. The accidents which do occur will be more severe than assumed, because relatively high speeds can and will be achieved in Level of Service E and F traffic conditions that will be prevalent. Also, many head-on conflicts will likely result through the implementation of the traffic control diagrams as drawn. These conflicts will lead to serious accidents. Another problem likely to lead to serious accidents is that the "taper" shown on the traffic and access control diagrams for traffic cone and barricade placement does not meet MUTCD standards.

3. The SPMC reliance on other evacuees to remove many road blockages is imprudent, especially for those blockages which have resulted from accidents which injure people or which have rendered vehicles inoperable.

4. The plans for surveillance to spot accidents and road blockages are inadequate, and many road-blocking accidents will not be recognized for significant periods if at all.

5. The plans for tow trucks to respond to remove road-blockages are inadequate because the plans rely on an insufficient number of trucks; all four (4) of those tow companies relied upon by the SPMC have indicated that they either will not respond or that they cannot be relied upon to

respond; many drivers relied upon will not show up, especially in areas contaminated with or at risk of receiving radiation; the trucks are to be based at inappropriate locations; many lack the communication radios necessary to respond efficiently; and in certain locations the traffic congestion will eliminate two-way road flow, so tow trucks will not always be able to travel to the blockages.

J. The SPMC's ETEs are based on assumptions about road, intersection, and ramp capacities in Massachusetts which are higher than can be expected, even for good weather conditions.

K. The ETEs are based on overly optimistic assumptions about the discharge headways that can be achieved at specific critical intersections in the Massachusetts EPZ towns.

L. For the adverse weather scenarios, the ETEs are based on overly optimistic assumptions of the effects of rain, snow, and ice on driver behavior, driving speed, accident rates, disabled vehicles, and capacities of roads, intersections, and ramps. To some extent, these overly optimistic assumptions result from the fact that those calculating the SPMC's ETEs did not consider adverse weather which was "severe enough to define the sensitivity of the analysis to the selected events," as is required by NUREG 0654, Rev. 1, App. 4, § IV A.

M. The ETEs are based on inaccurate assumptions about (1) the extent of the Massachusetts population which will spontaneously evacuate prior to an order to evacuate and (2) the delaying effects such spontaneous evacuation will have, both within and outside the EPZ, on evacuation times.

N. The ETEs fail entirely to take into account the delays in ETEs that will result from the "rolling" late staffing that will occur at the traffic and access control posts. Traffic and access control guides will show up, not all at once, but intermittently in groups of twos, threes, and fours over a long period of time, and will be assigned haphazardly, first, to priority 1 traffic posts, which have not themselves been ranked sequentially in order of staffing priority, and then to priority 2 and 3 traffic posts, again without regard to staffing priorities within each of these groupings.

O. The ETEs are based on the unrealistic assumption that the ORO traffic guides, who are not professional traffic handlers, will be able to move the traffic in Massachusetts just as fast as State/local professionals would.

P. The ETEs are based on the erroneous assumption that the traffic and access control diagrams can be understood and will be implemented correctly by the traffic control personnel. In fact, the diagrams are ambiguous, confusing, do not indicate which position at a given intersection should be

staffed first, do not sufficiently inform traffic guides what the term "discourage" really means, and contain no clear instructions on how to place cones and barriers. These problems with the diagrams cannot be remedied by training.

Q. The ETEs fail to account properly for the thousands of "through" vehicles that could be in the Massachusetts portion of the EPZ on Interstates 495 and 95 and on many other major roads as well.

R. The ETEs fail to account for the delays that will occur in alerting the entire population after a decision to evacuate is made, especially those delays resulting from the lack of a fixed siren system.

S. The ETEs fail to account for the delays that will result from the confusion among the public caused by hearing different emergency messages from different sources. The messages that could be heard include, but are not limited to:

1. The state of New Hampshire FBS messages;
2. The ORO informational messages;
3. The messages and EBS broadcasts from Massachusetts state officials;
4. The messages from Massachusetts local officials; and
5. Media broadcasts and news reports of all sorts.

T. The ETES fail to account for the large number of evacuees who will engage in aberrant driver behavior in order to bypass the extremely long and very slow moving traffic queues.

U. The ETES are based on a traffic management plan which continues (astoundingly) to rely upon the use of an exit ramp at Rt. 110 and I-95 southbound. This path leads over a curbed, grassy median that cannot be traversed in adverse weather. In good weather its use would substantially delay evacuating vehicles and lengthen ETES.

V. The ETES for the SPMC were calculated relying on outdated estimates of the number of campground spaces and hotel, motel, and guest house rooms in the Massachusetts portion of the EPZ.

W. The SPMC's ETES do not account for the large number of evacuating vehicles which will travel south on Rt. 1A from Seabrook, NH, cross the state line, and seek to evacuate through Salisbury, Massachusetts, on Rt. 1A.

X. The SPMC's ETES fail to account for the large number of transients who regularly visit portions of the Massachusetts EPZ which are not in the beach areas, e.g., Newburyport's downtown and historic areas.

Y. The ETES fail to account for huge crowds which gather for special event days in the Massachusetts portion of the EPZ.

Z. The ETEs fail to account for the large number of vehicles which will run out of gas or overheat and stall as they travel at very low speeds, and frequently stop, and idle in the long traffic queues exiting the beach areas on hot days.

AA. The ETEs are based on the implicit assumption that in implementing the traffic management plan the placement of cones and barricades will not actually block vehicles with legitimate reasons to travel against or across the flow of evacuation traffic. In fact, if the traffic management plan is implemented according to the diagrams in Appendix J and cones and barricades are placed as shown, these vehicles will be blocked at many intersections. The delays that will result to these counter/cross-flowing vehicles, and to the evacuating vehicles when ad hoc steps are taken to allow the counter/cross-flow traffic to proceed, have not been taken into consideration; if they had been, the ETEs would be significantly longer.

BB. The ETEs were calculated using an irrelevant "planning basis" which assumed that the public is notified to clear the beaches at the Alert level, that a General Emergency occurs 15 minutes later, and that the order to evacuate is transmitted to the public 10 minutes after the General Emergency is declared. See Seabrook Station Evacuation Time Estimates and Traffic Management Plan Update, p. 4-1. This "planning basis" has no relationship to the SPMC, however, because in Amendment 3 to the SPMC NHY has eliminated the early



beach closing option. "Notifications to individuals at state parks and outdoor areas other than Parker River National Wildlife Refuge will be conducted in the same fashion as for the general public. Individuals in these areas will be asked to leave the Plume Exposure EPZ." Plan, § 3.6.1.E. Thus, unlike the situation assumed by KLD in conducting its ETE analyses, the beach population will not get a 25 minute headstart before the issuance of the order to evacuate. This will affect the ETEs significantly.

CC. The ETEs are based on the unrealistic assumption that evacuating drivers will take the routes out of the EPZ which are recommended by the plans. In fact, a significant portion of the drivers will seek other routes in an attempt to bypass long traffic queues, or to access I-95 or I-495 at points not contemplated by the plans, or simply to head in directions which take them where they want to go. The 15% reduction factor utilized in the IDYNEV model does not account for the full effect of drivers taking different routes.

DD. The ETEs are based on the unrealistic assumption that the implementation of access control will not significantly delay or impede returning commuters as they travel back into the EPZ to residences in one of the six Massachusetts communities. In fact, the implementation of access control, especially on northbound I-95 and I-495 will cause massive congestion, confusion, and delays to returning commuters.

EE. Because there are no special population evacuation times in the SPMC, the ETes in the SPMC appear to be based on the unrealistic assumption that the evacuation of the transport dependent population and those in special facilities will take no longer than the evacuation times calculated for evacuees using private vehicles.

FF. The ETes are based on certain erroneous assumptions, built into the IDYNEV model, about the service volume ( $V_F$ ) of Massachusetts highway sections under congested conditions. The reduction factor ( $R=0.85$ ) utilized appears to have been derived from data collected on freeways. Instead, a site-specific reduction factor could easily have been derived from data collected on the major evacuation roads in the Massachusetts portion of the EPZ under congested conditions. If this had been done, the realistic value for  $V_F$  for the roads in Massachusetts would have been found to be in the range of 0.75 of  $V_E$ .

CONTENTION 40: In making the choice of protective actions during an emergency, it is extremely important for the decision-makers to have ready access to maps which accurately show the population distribution around the nuclear facility. The SPMC fails to include such maps. NUREG 0654, Rev. 1, Supp. 1, Section II.J.10 states: "The offsite response organization's plans to implement protective measures for the

plume exposure pathway shall include: . . . (5) Maps showing population distribution around the nuclear facility. This shall be by evacuation areas (licensees shall also present the information in a sector format)." Absent such maps, the SPMC fails to comply with 10 C.F.R. 50.47(a)(1), 50.47(b)(10), and NUREG 0654, Rev. 1, Supp. 1, Section II.J.10.b.

BASIS: The SPMC's map section is Appendix A. It contains no population distribution maps. Table 3.6-1 found at the end of a subsection labeled "Evacuation Process" in Section 3 of the SPMC, lists what is described as the "maximum evacuating population" by town for both the "permanent residents" and the "peak population." The figures listed for the permanent residents are incorrect for the current time period. The "peak" population totals for both "summer midweek" and "summer weekend" are significantly too low. Regardless of the accuracy of these figures, however, this format -- a table -- does not provide population distribution information to decision-makers in the more accurate and useful fashion that a population distribution map does. It is , therefore, not an effective substitute for the NUREG 0654 criteria. This criteria also cannot be met by reference to KLD's ETE study of August 12, 1986, as the Applicants themselves have acknowledged throughout their testimony in the NHRERP hearings that the peak population figures contained therein are not accurate for 1988. Moreover, that study uses "roses" or "pie" graphs to present population data in a sector format; it does not include "maps" showing

population distribution "by evacuation areas," as required by Section II.J.10.b. Prudent protective-action decision-makers for Massachusetts would find the outdated, inaccurate KLD "pie" sector graphs to be of no value.

CONTENTION 41: There is no reasonable assurance that the SPMC is adequate to protect the health and safety of the public because for the transients in the beach areas for whom no sheltering or other protective action option is provided, the ETES on crowded beach days are simply too long. While there is no NRC limit on evacuation times for populations for which the other protective action option of sheltering is available, where no sheltering option is provided, ETES must have limits to ensure adequate protection. Those limits are exceeded here because the beach populations are entrapped and unable to timely evacuate. Therefore, the SPMC does not meet the requirements of 10 CFR 50.47(a)(1), 50.47(b)(10), and NUREG 0654, Rev. 1, Supp. 1, II.J.

BASIS: The underlying legal rationale for the initial NRC decisions which found that there are no maximum limits on ETES was that ETES are simply a tool to be used by protective action decision-makers to aid them in their decisions whether to shelter or evacuate a given segment of the population. See, e.g., Cincinnati Gas & Electric Co. (Wm. H. Zimmer Nuclear Power Station, Unit No. 1), 17 NRC 760, 770-771 (1983). The

longer the ETEs, the more attractive sheltering generally becomes as an alternative protective action. Subsequent NRC decisions have often repeated the proposition that there are no maximum limits on ETEs, but none has sought to reformulate the underlying rationale. Here, however, that rationale does not apply: there is no sheltering option for the beach population, nor are radioprotective drugs (e.g., KI) to be issued to them. On days when the beaches are crowded, the realistic ETEs for the Salisbury Beach area exceed 11 hours. Whatever the limit on ETEs should be for those for whom no other protective action is provided, 11 hours substantially exceeds it. Thousands of transients in the Salisbury Beach area are entrapped by traffic congestion within 2-5 miles of the Seabrook Station for many hours. During the entire period of their entrapment, these thousands of transients will be exposed to radiation without any available protective measures.

CONVENTION 42: The SPMC does not provide protective action decision-makers with sufficiently realistic ETEs for the Massachusetts EPZ population for a wide range of times and conditions in the summer months. Only one pre-determined ETE is provided for a summer weekend with good weather, despite the fact that ETEs for such occasions vary dramatically as the size of the beach population (a factor to which the ETEs are highly sensitive) rises and falls. These beach population changes are

substantial and occur from hour to hour, day to day, and week to week. Absent a real-time, computer-based system to monitor the size of the beach population and compute real-time ETEs, the SPMC is deficient, because there is no reasonable assurance that adequate protective measures can and will be taken as required by 10 CFR § 50.47(a)(1).

BASIS: A "real-time" computer-based data collection/ETE calculation system should be installed by linking a series of roadway traffic counters that form a cordon around the Massachusetts beach areas with a small computer programmed to compute ETEs instantaneously. This system would enable PAR decision-makers to have realistic ETEs at the moment a decision must be made without having to make wildly uncertain extrapolations, as the SPMC now requires, from a single pre-determined ETE in a table which assumes a given fixed population at mid-day. The SPMC contains no guidance whatsoever on how these extrapolations are to be made, and even if there were such guidance, there is no real-time data collection system to enable that extrapolation to be made in a manner that produces evacuation time estimates of reasonable accuracy for the conditions at hand. Thus, for example, using the SPMC a decision-maker can only guess what the realistic ETE is for 4:00 p.m. on a Saturday in mid-August when many of the beach-goers who were there at 1:00 p.m. have left and the beaches at mid-day were somewhat crowded but not at capacity.

Similarly, a decision-maker cannot know, with any reasonable assurance, what the realistic ETE is at 2:00 a.m. on a Thursday in late July, when relatively few day-trippers are present but an unknown number of seasonal, weekly, and overnight visitors are staying in rental units, beach cottages, motels, and campgrounds in the area. The population in the beach area fluctuates so dramatically (by tens of thousands of people) over the course of only a few hours that having a single ETE, as the SPMC does, for a summer weekend (good weather) leaves protective action decision-makers ill-equipped to make the calculations needed for protective action decisions.

CONTENTION 43: Because the SPMC's evacuation time estimates have been rejected by State and local officials as totally unrealistic and unreliable, in the event of an emergency at Seabrook Station, Massachusetts State and local decision-makers will always reject any immediate implementation of ORO's protective action recommendations based on those ETEs. As a result, and because those decision makers have no alternative set of ETEs available to them, State and local decision-makers will make an ad hoc judgment regarding what protective actions are likely to maximize dose reductions. However, there is no reasonable assurance that adequate protective measures can or will be taken through such an ad hoc decision-making process. Therefore, the SPMC does not meet the requirements of 10 CFR 50.47(a)(1), (b)(10), (c)(10), and NUREG 0654, Supp. 1, Sections II.J.10.1 and 10.m.



BASIS: While State and local Massachusetts officials have not read or reviewed the SPMC, they have been informed by consultants retained by the Attorney General that the ETES contained in the SPMC are not reliable and that realistic evacuation times are likely to be much longer. They also understand that the ETES in the SPMC were calculated using incorrect assumptions about notification times, beach population, times to staff traffic posts, an "early beach closing," and traffic orderliness. If NHY's CRO ever were to forward a recommendation for a protective action to State or local decision-makers, and that recommendation was based on the SPMC's ETES, there is no question that these officials would always reject any immediate implementation of that PAR. Having no set of pre-calculated, realistic ETES of their own, these decision-makers would necessarily have to make their own PAR judgment on an ad hoc basis.

CONTENTION 44: The SPMC is deficient because it utilizes a set of evacuation time estimates which have been rejected by Massachusetts State and local officials as totally unrealistic and unreliable. In the event of an emergency at Seabrook Station Massachusetts officials will always reject any immediate implementation of ORO's protective action recommendations based on those ETES until they have had a chance to assess the situation independently. Because Massachusetts decision-makers have no reliable evacuation time

estimates of their own, this independent assessment can and will require an uncertain amount of time. Thus, the SPMC fails to provide reasonable assurance that in the event of an emergency Massachusetts officials will make protective action decisions promptly enough to permit the effectuation of protective measures which are "adequate" or which achieve dose savings that are generally comparable to what would reasonably be accomplished were State and local officials fully cooperating in the planning process and were in possession of a set of ETES in which they had confidence. At best, because of this SPMC deficiency, there is simply too much uncertainty with respect to how promptly Massachusetts officials can and will make protective action decisions. At worst, this deficiency guarantees that such decisions cannot and will not be made promptly. The SPMC therefore violates 10 CFR § 50.47 (a)(1), 50.47(b)(10), NUREG 0654, Rev. 1 Supp. 1, Sections II.J 9, J.10.1, and J.10.m.

CONTENTION 45: The SPMC fails to meet the planning standards set forth at 50.47(b)(10) and NUREG 0654 II. J. because no adequate provisions for security in evacuated areas have been made. The SPMC contains no discussion of security in evacuated areas. Table 2.0-1, the "Key Position Response Function Matrix," provides that primary responsibility for law enforcement lies with the State Police and local police

authorities. No procedures are set forth for coordinating these agencies' activities and providing for security in evacuated areas. Moreover, the Local EOC Liaison Coordinator has secondary responsibility for law enforcement but neither PRO-1.8 nor any other portion of the SPMC indicates what ORO's capabilities in this regard actually are.

CONTENTION 46: The SPMC fails to meet the planning standards set forth at 50.47(b)(10) and the guidance of NUREG 0654 II. J. 10.a because the bus routes as delineated in the SPMC are totally unrealistic and cannot form the basis for adequate planning.

BASIS: The proposed bus routes for the 6 Massachusetts communities reflect the SPMC's drafters complete absence of familiarity with the local conditions. Bus routes include paper roads that do not exist and dirt roads virtually impassable to buses. Further, routes often exacerbate local evacuation traffic problems and propose travel against counter flow traffic that will be impossible. The routes also often involve the transport of populations back toward the reactor to designated transfer points. Use of these proposed transfer points is often prohibited by local zoning laws.

#### Special Facilities

CONTENTION 47: The SPMC fails to offer reasonable assurance that adequate protective measures can and will be

taken in a timely fashion for school children. Thus, it fails to comply with 10 CFR 50.47(a)(1), 50.47(b)(10), 50.47(b)(14), 50.47(b)(15), 50.47(c)(1); NUREG 0654, Rev. 1, Supp. 1, II.J, II.N and II.O; and NUREG 0654, Rev. 1, Appendix 4.

BASIS:

A. The SPMC does not contain separate emergency response plans for the staff and students at each of the schools, including day care centers and nursery schools, in the six Massachusetts EPZ communities, and those outside the EPZ which receive students from inside the EPZ. Nor does the SPMC provide any reasonable assurance that each of these schools has an adequate school-specific plan for responding appropriately or in a coordinated or integrated manner with the SPMC in the event of a radiological emergency at Seabrook Station. Without adequate school-specific plans for each school, there is no reasonable assurance that adequate protective measures can and will be taken for school children. Most schools have no such plans. Existing emergency plans, while adequate for responding to fires and snow storms, are wholly inadequate for responding to a radiological emergency, especially one which is serious and fast-developing. While reference is made in Appendix F of the SPMC to a "Generic Massachusetts Public School Plan," the schools have no knowledge of such plans and would not keep or use them if offered by NHY. Nor could any "generic" plan ever be adequate for the wide range of different types of schools, which have vastly different student populations, student age

groupings, student/teacher ratios, class sizes, layouts and construction (for sheltering), organizational capabilities, compositions of special needs children, different methods of notifying parents, etc. Absent the existence of institution-specific radiological emergency response plans to address the different preparedness needs of each school, there is no reasonable assurance that adequate protective measures can and will be provided to school children.

B. The implementing procedures for the School Coordinator and School Liaisons are poorly drafted, vague, and confusing. For example, Pro-1.9 § 5.2.1 instructs the School Population Liaisons upon arrival at the Staging Area to "proceed to your location as shown in Attachment 3, Layout of Staging Area, of Implementing Procedure 3.2." The Attachment referred to is the NHY ORO Message Form, not the staging area layout, which is Attachment 5 of Pro. 3.2. Moreover, the procedures for the Coordinator and School Liaisons are set forth in two separate Implementing Procedures (1.9 and 2.7) which are neither identical nor sufficiently integrated with each other to ensure that confusion and mistakes will not occur.

C. In the event that a School Liaison must perform her functions from the Staging Area, rather than at a local EOC, she must perform almost all her tasks using a commercial telephone which is shared with either a Special Population Liaison or a Local EOC Liaison. See Pro-3.2, Attachment 5. In either case, there is no reasonable assurance that the School

Liaison can and will be able to perform her functions in a timely manner given (1) the likelihood that all commercial telephone lines will be overloaded with phone calls during an emergency and (2) the fact that the phone itself will likely have to be shared with another individual whose functions are of vital importance, are performed almost solely on the telephone, and require almost constant telephone use during the same critical periods of the emergency when the School Liaison will need a phone to perform her tasks.

D. If the School Liaison calls a local EOC and learns that she will be admitted, she goes there. Pro. 1.9 § .2.4; Pro-2.7, § 5.3.2. There is no assurance, however, that upon her admittance to a local EOC she will have timely access to a telephone to perform any of her functions or that, even if a phone is available to her in a timely fashion, the phone lines will not be overloaded and unavailable.

E. The Implementing Procedures do not make it clear what the School Coordinator will tell the Liaisons to do when the Coordinator is informed that NHY's ORO has "recommended" a PAR to State or local officials but is awaiting a response. The procedures for Special Population Coordinators and Special Population Liaisons do not differentiate clearly between a PAR which has been recommended by NHY's ORO but is not yet authorized (or rejected) and a PAR being recommended after having been authorized by State/local officials. If the SPMC

contemplates sending buses to schools upon OK. There recommendation of an evacuation PAR to State/local officials, this would create a host of problems, especially if the State/local officials were to decide sometime later when the buses were loading to direct the population to shelter. If the SPMC does not contemplate that buses/ambulances would be sent upon the issuance by ORO of a mere PAR recommendation to State/local officials, it should clearly state this in the Implementing Procedures and eliminate this confusion.

F. The SPMC's reliance on the 16 bus companies listed in Appendix M, pp. M-4, 5, to provide the drivers, vans and buses listed is unfounded. At least eight of the 16 companies have either confirmed that they will not participate or that they will offer only the buses, vans and drivers that might be available, if any, at the time of an emergency. Thus, there is no reasonable assurance that a single bus, van or driver will be available from at least eight of the 16 companies relied upon. The remaining companies do not have sufficient drivers and buses to transport all school children out of the EPZ in a timely fashion.

G. The SPMC underestimates the number of school buses that will be needed. There are more students than have been estimated, especially in day care and nurseries, but also in the schools. In addition, during an emergency additional adult supervision will be needed on each bus, and the average capacity of the buses has been overestimated.



H. The SPMC procedures for notification to the school Coordinator and the confusing implementing procedures for the School coordinator in both Pro. 1.9 and 2.7, prohibit a timely offer of information and transport resources to a School Superintendents for all public schools, especially in fast breaking accidents at Seabrook Station. The School Coordinator has to be briefed himself, and then must then call each Superintendent one by one. See Pro-1.9, § 5.1 and Attachment 2. Some of the school Superintendent phone numbers are not even listed in Appendix M. Clearly the phone conversations with each Superintendent could be quite lengthy, especially since they will have had no prior emergency response training and will not know a great deal. The last Superintendent may not be notified for a number of hours after an Alert is declared. Where school officials have not already heard EBS messages, such time-consuming procedures may prevent school officials from considering early dismissal or other early protective actions. Those school officials who may have already "heard" of a problem at Seabrook Station may already have begun ad hoc protective action which are inconsistent with the SPMC, e.g., instructing parents to pick up children or busing students to some location other than a reception center or a host school facility.

I. The SPMC's procedures for providing information and offering transport resources to private schools, day care

and nurseries is even more time-consuming than that for notifying School Superintendents. Such notification is done by School Liaisons after they have reported to the Staging Area, been briefed by the School Coordinator and, if permitted access, driven to a local EOC, where a telephone may not be available immediately. See Pro. 1.9, § 5.2 and Attachment 4; Pro. 2.7, § 5.3. Then calls must be made, one by one, again with lengthy conversations likely occurring for each call. The last school will not be notified for many hours after an Alert has been declared. As a result, these school officials may be prevented from considering early dismissal or other protective actions. Those private school officials who may have already "heard" of a problem at Seabrook Station may already have begun ad hoc protective actions which are inconsistent with the SPMC, e.g., instructing parents to pick up children for busing students to places other than reception centers or the host school facility.

J. The SPMC proposed to include school information in the EBS messages if the schools request that this be done. If most of the schools respond to this offer, the EBS messages will **become** extremely long and drawn out.

K. The SPMC's provisions offer no reasonable assurance that sheltering can or will be implemented appropriately or in a timely fashion in the schools. The SPMC contains procedures for having the School Liaisons call the

special facilities and read a prescribed School Protective Action Message." Pro-2.7, Attachment 1. If sheltering is recommended, however, the Liaison provides no information whatsoever of how this is to be done. Cf. Pro-2.7, Attachment 3. It assumes without any basis for doing so that the school has its own sheltering procedures. For those facilities which have no sheltering plan, the message simply affords inadequate guidance on how to implement a timely, safe and effective sheltering response. There are no instructions, for example, as to where in the school shelter should be sought (i.e., in basements or interior rooms), no instructions regarding the closing of windows and doors, and no instructions regarding what actions should be taken for respiratory protection (such as placing several layers of toilet paper over the mouth and nose). No specific TV or radio stations are mentioned for receiving EBS information about sheltering instructions. There is, therefore, no reasonable assurance that adequate sheltering will be provided.

L. There are a significant number of schools throughout the Massachusetts EPZ that would be totally inappropriate for sheltering school children -- the population most sensitive to radiation exposure -- because the schools have no basements or interior rooms, and have exterior walls which are almost entirely, or substantially, comprised of glass. In addition, there are a number of newer schools with climate control systems that are totally reliant on outside air.

M. The SPMC does purport to offer schools transportation assistance in the event that an evacuation is recommended but it makes this offer in less than a timely fashion (as noted above, and when the offer is made it does so in a way which does not give schools the option of choosing to use their own staff and equipment to effect evacuation. The School Protective Action Message read by the School Liaison first has the Liaison "verify your transportation requirements in the event of an evacuation." Pro. 2.7, Attachment 3. The Liaison then reads this sentence: "We will have the vehicles you identify dispatched to your school [ ] to support your immediate evacuation." This is inconsistent with the Liaison's "conditional response activities" in Pro. 1.9, Attachment 3, p. 4, which suggests that the Liaison at least "inquire" whether the school's regular contracted bus company is assisting with transportation and, if so, whether they know the route to the appropriate reception center.

N. For schools which consider using their own transportation resources, unless the buses are there at the time, there is no reasonable assurance that the drivers will respond to the schools during a radiological emergency at Seabrook Station. For some schools, many of the drivers have families of their own and live in the area, and they cannot be relied upon.

O. When schools are asked to verify their transportation needs, most schools will not be able to respond

with any reasonable degree of certainty if they try to guess how many of their regular contracted buses will show up.

P. The School Liaisons will not be able to state how quickly the SPMC/ORO buses will arrive at given schools. As a result, prudent school officials will not wait for ORO's buses but will seek to implement an ad hoc transportation scheme or will ask parents to pick up children.

Q. There is no reasonable assurance that, in the absence of school-specific radiological response plans, sufficient school staff will stay at schools with children waiting for an unknown period of time for NHY ORO buses. School teachers will not be willing to trust NHY ORO's assurances that the buses will arrive in a timely fashion. They will also be concerned about the well-being of their own families. Therefore, teachers and staff will not stay with students for more than a very short period of time waiting for ORO's buses. Since for many schools, the buses cannot arrive for hours, many teachers and staff were likely to press school officials to pursue other ad hoc strategies, and most will seek to leave by other means.

R. There is no reasonable assurance that sufficient teachers, or other school staff, will volunteer on an ad hoc basis to accompany and supervise the students on the evacuation buses, at the Reception Center, and at the Host Special Facility. ORO Bus Drivers, Route Guides, and other ORO staffers are inadequate substitutes. Many of the students

themselves simply will not get on a strange bus driven by a stranger unless a familiar and trusted person rides along with them.

S. The SPMC's plans for school children are unworkable because many parents will not allow their children to be left behind waiting for ORO buses that the parents have no confidence will ever arrive. Despite the EBS messages which, as provided in Pro. 2.13, instruct parents not to drive to school to meet their children "since schools are now being evacuated," most parents will call the schools, learn that no ORO buses have yet arrived and that no precise time of arrival is available, and will go to the schools to pick up their children. School phone lines will be jammed, and the School Liaisons will be unable to contact many schools. Many parents who call in will receive repeated busy signals, and they too will travel to the schools. Absent pre-planning by the schools which gives parents full assurance that their children will be safely evacuated, and a coordinated campaign by school officials to educate parents on the proper parental response to a radiological emergency, there is inadequate planning for school children.

S. The SPMC fails to ensure that school students who walk or drive themselves to school will take appropriate action during an evacuation when they leave the schools on foot or in their own vehicles. There is no assurance that they will go to



Reception Centers or the Host School Facility. There is also no assurance that they will go home and meet up with their families.

T. There are no institution-by-institution evacuation time estimates for the schools, as required by NUREG 0654, Rev. 1, App. 4, p. 4-3.

CONTENTION 43: The SPMC fails to provide reasonable assurance that adequate protective measures can and will be implemented for all those persons who are patients in the two hospitals within the Massachusetts EPZ and for those who become injured during the emergency, either from natural causes such as automobile accidents or from radiation contamination/exposure. The SPMC therefore fails to comply with 10 CFR 50.47(a)(1), 50.47(b)(10), 50.47(b)(12) and NUREG 0654, Rev. 1, Supp. 1, II.J.10.d, 10.e, 10.g; and II.L.

BASIS:

A. In the event of an evacuation, the two hospitals located within the EPZ have more patients than can be accommodated by the hospitals with which NHY has reached agreements. The Amesbury Hospital currently has approximately 44 beds in use. They are at full capacity at this time and will be expanding to 58 beds in August, 1988. The Anna Jaques Hospital in Newburyport has approximately 156 beds and is presently operating at 58% capacity (or approximately 90



patients). Thus, in the event of an evacuation, accommodations would be required for approximately 148 patients.

The hospitals with which NHY purports to have agreements would not be able to provide the required beds for these patients. A summary of the services offered by the hospitals designated in the SPMC are as follows:

Hospital A has eleven physicians to handle simple contamination cases. However, in regard to the relocation of patients from hospitals within the EPZ, or accommodating radiologically injured persons, the hospital would be able to provide only five beds at best.

Hospital B has signed a letter of agreement to care for patients located at the Anna Jaques Hospital in the event of a radiological emergency. However, Hospital B has no intention of treating radiologically contaminated individuals.

Hospital C has contracted with NHY officials to provide emergency disaster services. They would be able to activate these services within a twenty-four hour period. Hospital C would only be able to accommodate approximately ten very severely injured patients. The hospital has a capacity of 730 beds of which 85-90% are usually occupied.

Hospital D has no agreements with NHY to care for relocated patients or to provide decontamination facilities.

Hospital E has agreed with NHY officials to accept transferred patients from other hospitals. Its capacity

is 300 beds, of which 20 are usually available. It does not have the facilities to handle radiologically contaminated individuals.

Hospital F has agreed to provide only acute care services to nursing home patients. They have declined to offer decontamination facilities after being approached by NHY. They have a capacity of 108 beds of which 90 are usually filled.

Hospital G has agreed to assist in the relocation of patients from Anna Jaques Hospital. They have not agreed to provide treatment for radiologically contaminated individuals. Hospital G could accommodate approximately forty patients in the event of an emergency.

Hospital H has not made any agreements with NHY regarding the relocation of patients within the EPZ, or for treatment of radiologically contaminated individuals, in the event of an emergency. The hospital is equipped to treat up to three "chemically affected" patients. The hospital is licensed to accommodate 365 patients and might have approximately ten beds available in the event of an emergency.

Hospital I has reached no definite agreement with NHY. It was the understanding of the Chief Operating Officer, from discussions with NHY conducted over one year ago, that Hospital I would act as a "back-up" to Anna Jaques Hospital. Hospital I can accommodate 311 patients and operates

at about 64% of capacity. They do not have any decontamination facilities. In the event of an emergency, it could provide approximately thirty beds.

In summary, the hospitals identified in the SPMC would be able to accommodate, at best, approximately 133 patients. This total includes beds to be provided by Hospitals D and I which have not entered into any agreements with NHY. Even assuming that these hospitals would provide accommodations in the event of an emergency, the total number of beds provided would fall short of the approximate 148 beds required just to relocate Amesbury Hospital and Anna Jaques Hospital.

The SPMC also fails to ensure that adequate accommodations will be available for the radiologically injured in the event of an emergency. It fails to take into consideration that during a radiological emergency it is highly likely that hospitalization will be required for people suffering non-radiological injuries sustained during an evacuation (as a result of auto accidents, heart attacks, etc.) Reasonable estimates of the number of persons who may need to be hospitalized as a result of radiation from a serious radiological accident at Seabrook Station greatly exceed the beds available. These estimates are based on the size of the beach population on busy summer days, the lack of sheltering available to them, and the fact that severe traffic congestion will entrap thousands of persons in the beach areas and prevent their evacuation for many hours. The arrangements in the SPMC

for their care are grossly inadequate. Reasonable estimates of the number of people who may sustain non-radiological injuries during an evacuation also greatly exceed the beds available.

Furthermore, decontamination facilities are inadequate at the hospitals identified in the NHY plan. Only Hospital A and Hospital C have stated they have the ability to treat radiologically contaminated persons. Hospital C would only be able to treat ten cases, at most, of radiological contamination. Hospital H is equipped to treat up to three "chemically affected" patients. It is reasonably estimated that a number of persons who will need hospital decontamination services will greatly exceed the capacity of these hospitals to provide this service.

B. The SPMC makes inadequate preparations for the safe, efficient evacuation of patients located within the EPZ at Amesbury Hospital and Anna Jaques Hospital, Newburyport. Amesbury Hospital has been contacted by NHY officials but the role and/or responsibilities of the hospital were unclear to hospital administrators. It does not have any agreements with any other hospitals at this time regarding the relocation of patients during a radiological emergency. In the event that an evacuation was ordered, it would have to be accomplished in an ad hoc fashion by the town ambulance service, private ambulance service, or by patient's families. These sources of transportation would be unreliable. However, assuming that

transportation were available, an evacuation of the hospital would take many hours. No institution-specific evacuation time estimate has been prepared. At Anna Jaques Hospital, no evacuation plan has been developed to provide for the evacuation and relocation of patients in the event of a radiological emergency. Any evacuation which would occur would be ad hoc, accomplished through private ambulance services with which the hospital has "working relationships" but no written agreements. These sources would be unreliable, however, in the event of a radiological emergency. Assuming that adequate transportation were available, an ad hoc evacuation of the hospital would take many hours. No institution-specific evacuation time estimate has been prepared.

C. Absent pre-emergency planning, including the development of site-specific hospital radiological emergency response plans which the staff believes to be adequate, and including adequate training of staff for a proper emergency response, there is no reasonable assurance that sufficient hospital staff will stay at the Amesbury and Anna Jaques Hospitals, or will report to duty, to perform emergency response functions in a radiological emergency. Many staff members will experience severe role conflict and will leave the hospital.

D. The SPMC has arrangements for an inadequate number of ambulances to evacuate all those who may reasonably need

such transportation so there is no reasonable assurance that NHY ORO can implement a timely evacuation of the two hospitals in the Massachusetts EPZ.

E. The SPMC provides no reasonable assurance that the Amesbury and Anna Jaques hospitals are suitable as shelter in a radiological emergency.

F. The sheltering instructions provided to hospitals by ORO are wholly inadequate to provide reasonable assurance that adequate sheltering measures can and will be taken by hospitals.

G. The Generic EPZ Hospital Plan mentioned in Appendix G is too vague to be of any real benefit to the hospitals. Amesbury Hospital received such a plan but has not kept it. There is no indication that Anna Jaques would keep it or find it of any benefit either. Only site-specific EPZ hospital plans can provide reasonable assurance of adequate preparedness, and then only when backed up with a staff trained in appropriate emergency response actions.

H. The SPMC provisions are inadequate with respect to the provision of KI to persons in hospitals whose immediate evacuation may be infeasible or very difficult, in violation of NUREG 0654, Rev. 1, Supp. 1, II.J.10.e.

CONTENTION 49: There is no reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at Seabrook Station for

institutionalized persons (e.g., patients in medical facilities) who cannot be evacuated. The SPMC therefore fails to comply with 10 CFR 50.47(a)(1), 50.47(b)(10) and NUREG 0654, Supp. 1, II.J.9, II.J.10.d, and II.J.10.e.

EASIS:

A. Although the SPMC at 11an 3.6-6 acknowledges that there may be some institutionalized persons who cannot be evacuated, there is no reasonable assurance in the event of an emergency in whcih the general population is advised to evacuate that there will be sufficient medical and other support staff available to care for the patients who are unable to evacuate. The SMPC makes no provision for staffing hospitals under these circumstances. Especially in view of the fact that the SPMC makes no provision for informing or instructing hospital staff prior to an emergency of their expected emergency roles, there can be no reasonable assurance that sufficient hospital staff will be willing to remain behind in an emergency to care for patients, rather than seeing to the safety of their own families who may be evacuating.

B. The SPMC makes no provision for stockpiling KI in hospital facilities, but instead provides that the NHY ORO will distribute KI to hospitals at the time of an emergency. In fact the Implementing Procedures at Pro. 2.7, p.9, provide that KI will be delivered to hospitals only when and if requested. This procedure does not provide reasonable



assurance that KI can and will be distributed and administered to patients prior to plume arrival, especially in the event of a fast-developing accident. Therefore, since the effectiveness of KI depends upon its being administered prior to, or at least at the very moment of, plume arrival, there is no reasonable assurance that administration of KI as provided by the SPMC will be an adequate protective measure for these persons.

C. Although the SPMC at Plan 3.6-6, acknowledges that some institutionalized persons cannot be evacuated, there are no special decision-making criteria for the institutionalized population that take into account the special factors associated with sheltering or evacuating that population such as the greater risk to that special population from evacuation and the relatively better shielding protection that would be afforded by sheltering in a large building such as a hospital. Moreover, the message to be given to hospitals in the event of an emergency where the general population is instructed to evacuate, provides no instructions at all with respect to sheltering, and in fact, only speaks of the hospital's evacuation needs (see Pro-2.7 at 15) thus implying that all hospital patients will be evacuated regardless of the situation. Thus, the SPMC fails to provide reasonable assurance that adequate measures will be taken for institutionalized persons who cannot evacuate.

CONTENTION 50: The SPMC is deficient because it has not identified all or even most of the special needs resident population, has not sufficiently assured the security of acquired information about special needs individuals, has not adequately determined all the factors needed by individuals identified to cope with a radiological emergency, has not identified other individuals and organizations capable of assisting and the type of assistance required, and has no adequate procedures for assuring that this data is periodically validated. Thus, the SPMC does not comply with 10 CFR 50.47(a)(1), 50.47(b)(7), 50.47(b)(10), 50.47(c)(1), and NUREG-0654, Rev. 1, Supp. 1, Sections II.G and II.J.

BASIS:

A. The plan proposes to conduct periodic special needs surveys by mail. Plan 3.7. This method is unreliable for a number of reasons. All homebound persons in need of special assistance will therefore not be known to NHY and thus cannot be assisted in sheltering themselves or evacuation in the event of an emergency. The identification proposal is inadequate in the following respects:

1. The survey already conducted to identify persons with special needs produced unreliable results because of the wide-spread opposition to Seabrook. Future surveys will likely produce similarly unreliable results.

- a) Some persons refused to complete forms in protest;

b) Some persons reported that members of their families had special needs when, in fact, they did not;

c) Forms were collected by opposition groups and not sent in.

2. The deeply-felt and widespread opposition to of Seabrook does not engender confidence on the part of special needs persons that the information they might submit will be kept confidential, thereby discouraging submission of such data.

B. It appears that each special needs resident will be listed by name in Appendix M. This listing will also show each person's address, phone number, and an identification of those who are hearing-impaired, sight impaired, or mobility-impaired (in need of an ambulance, wheelchair van or curbside pickup). Section 7.2.3 of the SPMC states that because of the confidential nature of the contents, Appendix M will have "limited distribution." It will also "be maintained at [all] emergency response facilities and provided to Federal Regulatory agencies." Conceivably, there could be dozens of copies of Appendix M which contain this private information. The SPCM provides no procedures for assuring the effective security of this information. Any ad hoc procedures that may be devised by NHY do not provide reasonable assurance of adequate security.

C. Individualized determinations of functional characteristics of special needs persons necessary to cope with a radiological emergency are not sufficiently specific. Appendix M utilizes a "Needs Code" with only 5 general categories. Much more information on functional characteristics and needs could and should be obtained to enable appropriate and timely assistance to be provided.

D. With the exception of transporters during evacuation, individuals and organizations capable of assisting handicapped persons on an individual basis have not been identified. The plan also fails to identify people resources within the handicapped community who may be utilized in the development, review and exercise of plans for the homebound and other special needs residents.

E. The proposal provides no reasonable assurance that the information collected will be validated, updated, or maintained, but merely asserts that periodic surveys will be mailed which, for the reasons stated above, is an unreliable method.

CONTENTION 51: The SPMC's provisions for assisting the special needs resident population in taking protective actions are grossly deficient and provide no reasonable assurance that adequate protective measures can and will be taken by this

population. The SPMC therefore fails to comply with 10 CFR 50.47(a)(1), 50.47(b)(10), 50.47(c)(1) or NUREG 0654, Rev. 1, Supp. 1, Section J, and FEMA Guidance Memorandum 24 (Radiological Emergency Preparedness for Handicapped Persons.)

BASIS: The SPMC's protective action plan is a generic one for all those in the resident population who have handicaps. Once contacted, by phone or (if hearing-impaired) by Route Guide, the individual is asked to verify his or her transportation requirements in the event that an evacuation is recommended. If a PAR to shelter is in effect at the time contact is made, the individual is given some brief, pre-written sheltering instructions. If a PAR to evacuate is in effect at that time, the person is offered transportation assistance, either by waiting outside along pre-designated pick-up-routes or by dispatching a wheelchair van or ambulance to the person's home. Following transportation to a reception center, the person is registered and offered temporary shelter in a congregate care facility. This generic plan is inadequate to meet the different needs of different categories of handicapped individuals for each step in the process needed to engage in adequate sheltering or evacuation. Therefore, separate protective action plans need to be developed for each of the main categories of handicapped individuals present in the EPZ in order to provide reasonable assurance that adequate protective measures can and will be taken. See Memorandum 24 (Radiological Emergency Preparedness for Handicapped Persons),

which by its terms "supplements and builds upon the existing guidance" in NUREG 0654, which states as a formal "guideline" that "[p]rotective action plans have been developed for all categories of handicapped individuals present in the EPZ and integrated into the general radiological emergency plan." *Id.* D.5 (emphasis supplied).

B. There is one generic element, however, which does need to be included in each of the protective action plans for individuals with different categories of handicaps: for each handicapped individual who needs assistance with preparing to shelter, sheltering, evacuation preparation, travel processing through a reception center, living in a relocation (congregate care) facility, or recovery/re-entry, there needs to be a responsible and knowledgeable contact person to provide communication and physical assistance. Such contact people need to be identified in advance for each individual each activity which requires assistance. The SPMC fails to provide reasonable assistance that such contact people are available for each assistance-requiring activity. *See* G.M. 24, pp. 5-6.

C.

1. Evacuation. Once they are notified by phone to evacuate, some of those persons who are blind will need

assistance with packing necessities, packing provisions for their guide dog, with egress from buildings, and with entering unfamiliar vehicles, reception centers, and congregate care centers. Deaf persons will need someone to communicate with them by writing and/or by signing throughout the evacuation process. The pre-written generic message these individuals receive does not offer this assistance. Pro. 2.7, p. 15, Attachment 3.

2. If sheltering is ordered, some individuals who are blind will need a responsible contact to make sure windows and ventilators are closed and a wet cloth is being used for respiratory protection. Deaf persons will need a contact person to keep them informed of EBS messages. See G.M. 24 at 7. There is no assurance that Route Guides will be available to perform this function.

D.

1. Evacuation. The evacuation needs of the home-bound mobility-impaired population has not been adequately provided for in the SPMC because there are an inadequate number of ambulances and wheelchair vans to transport them in a timely fashion. At the reception centers and the host special facility there appear to be accessibility problems, based on examination of the floor plans provided. Bathroom facilities are seriously deficient at the Reception Centers because there are not enough toilet stalls and they are not wide stalls.



Necessary ramps appear to be lacking. The Decontamination Trailers are not accessible to the mobility-impaired.

2. Shelter. The SPMC does not appear to give mobility-impaired persons a choice if they prefer to be sheltered in their own homes or at work rather than undergo the strain of evacuation. See G.M. 24 at 7. Whenever they shelter, those with mobility impairments need a responsible contact to check on closure of windows and ventilators and on respiratory protection. The SPMC does not ensure that such a person will be available. Inadequate provision is made to have KI available for those whose immediate evacuation may be infeasible or very difficult. See NUREG 06545, Rev. 1 Supp. 1, II.J.10.e.

E. Mentally and Emotionally Impaired Homebound Persons.

1. Evacuation. The non-functional and emotionally disturbed will need the assistance of trained staff on a one-to-one or other appropriate ratio. At the Monitoring/Reception Center, a Special area should be set aside for registering, monitoring, and decontamination of the mentally and emotionally disturbed and for their maintenance, where staff can exercise appropriate supervision and control, and can administer medication. G.M. 24 at 8. The SPMC has not made such arrangements. Agreements to receive a specific number of individuals should be made with mental facilities outside the EPZ, to accommodate non-functional severe cases. G.M. 24 at 8. This has not been done. Responsible staff should remain with each mentally or emotionally impaired homebound person throughout the reception and recovery/re-entry phases. G.M. 24 at 8. This, too, has not been provided.

2. Shelter. A responsible contact is needed to perform or supervise the required protective actions, and adequate plans for offering for KI need to be made. G.M. 24 at 8. The SPMC is deficient in both these respects.

CONTENTION 52: The SPMC does not contain an appropriate or timely alert and notification system for residents who have special notification needs. The SPMC therefore fails to comply with 10 CFR 50.47(a)(1), 50.47(b)(5), 50.47(b)(7), 50.47(b)(10), and NUREG 0654, Rev., 1, Supp. 1, II.E, II.G, and II.J.

A. The SPMC contains procedures for dispatching a Route Guide to notify the hearing-impaired who could not be reached by telephone. This notification system is deficient, first, because the list of hearing-impaired individuals in Appendix M does not contain the names of many hearing-impaired residents. Second, the procedures themselves cannot result in a timely dispatch of the Route Guides. Third, the Route Guides will not be able to get to the homes of the hearing-impaired in a timely fashion, given their unfamiliarity with the area and the difficulties posed by access control, barriers and cones at traffic control posts which impede incoming drivers, and traffic congestion. Fourth, even if the Route Guides were to arrive in a timely fashion, many hearing-impaired individuals will simply not hear their banging or shouts at the door, or an apartment "buzzer," especially if they are asleep. Next, even if some

hearing-impaired individuals do sense that a person is at their door, when they look and see that this person is a stranger many hearing-impaired individuals will not let the Route Guide in, especially at night. If the Route Guide does run this gauntlet of obstacles and gets face-to-face with the hearing-impaired person, he hands the person one of three pre-scripted written messages, none of which are adequate for the situation.

B. The Route Guide's procedures, Pro. 2.11, are inadequate, ambiguous, and confusing. For example, no instruction is provided regarding how to catch the attention of hearing-impaired persons upon arrival at their homes. Also, while the prescribed message asks the hearing-impaired individual to "identify any special assistance we may provide," the Route Guide is not instructed whether or not he should actually provide that assistance.

CONTENTION 53: The SPMC does not provide for adequate pre-emergency public information to establish the preparedness needed to adequately meet the special needs of persons with handicaps during a radiological emergency. The SPMC therefore fails to comply with 10 C.F.R. 50.47(a)(1), 50.47(b)(7), 50.47(b)(10), 50.47(c)(1), and NUREG 0654, Rev. 1, Supp. 1, Sections II.G and II.J.

BASIS:

A. With respect to public education materials, the types of materials to be utilized will not be effective in reaching many special needs persons.

B. Because of widespread opposition to Seabrook, any calendars, posters, fliers, or adhesive labels which appear, as the draft materials do, to come from NHY will be discarded by a large percentage of the persons with handicaps in the six Massachusetts EPZ communities.

C. The public information materials which have been provided contain too little and inadequate information to establish adequate preparedness for those who have disabilities.

D. The materials have not been designed using channels or methodologies which are appropriate to specific handicap-types. The information is all in the form of printed words.

E. To adequately prepare for addressing the needs of those who have special needs during an emergency, specific information about the needs of those individuals must be targeted to the general public and emergency workers. The SPMC does not do this.

CONTENTION 54: The SPMC plans to minimize initial radiation exposure for those in special facilities through the implementation of a PAR to shelter or evacuate. See Plan § 3.5.3; Pro-2.7, Attachment 3. Other than hospitals, these special facilities include nursing homes, homes for the mentally retarded, elderly housing projects, and the like. The SPMC specifies that Special Population Liaisons from NHY's ORO will

telephone each special facility listed in Appendix M to relay the recommendations to shelter or evacuate. See generally Pro-1.10; Pro-2.7; Appendix M. Sheltering is to be implemented by the special facility staff without ORO support. Evacuation is to be assisted by the ORO to the extent that special facilities need transportation assistance. The plan, however, fails to identify all of the special facilities which exist in the EPZ. Even for those facilities which have been identified, there is not reasonable assurance that either sheltering or evacuation can and will be implemented in a timely manner or in a manner that allows all those in special facilities with handicaps, especially those whose movement is impaired, to take advantage of these protective responses. Thus, the people in special facilities will not be adequately protected in the event of an emergency, and the SPMC, therefore, fails to comply with 10 CFR § 50.47 (a)(1), 50.47(b)(3), 50.47(b)(8), 50.47(b)(10) and NUREG 0654, Supp. 1, II.A.3, II.C.4, II.J.10.d, II.J.10.e and II. J.10.g.

BASIS:

A. Not all the special facilities have been identified or listed in the SPMC. Specifically, not all the nursing homes have been listed. In addition, in the EPZ towns there are other unidentified special facilities in other categories besides nursing homes, homes for the mentally retarded, and elderly housing projects. These categories include community residences

for the mentally ill, transition homes for battered women, and local lock-ups.

B. The SPMC neither contains separate emergency response plans for the staff and residents at each of the special facilities nor provides any reasonable assurance that each of these facilities has an adequate facility-specific plan for responding appropriately or in a coordinated or integrated manner with the SPMC in the event of a radiological emergency at Seabrook Station. Without adequate facility-specific plans for each special facility, there is no reasonable assurance that adequate protective measures can and will be taken for those in special facilities. While Appendix F refers to a "Generic Massachusetts Special Facilities Plan," no generic plan for all special facilities, given their diverse populations, can provide the guidance necessary for each facility to respond appropriately. Moreover, the special facilities have not seen such a plan, and many will not keep it or rely on it even if NHY sends it to them.

C. The only "support and assistance" (see NUREG 0654, Supp. 1, II J.10.d) provided by NHY's ORO to special facilities when an evacuation has been ordered is transportation assistance in the form of buses, vans and ambulances. For many persons in special facilities this transportation is not sufficient nor useable without further pre-boarding support and assistance from "helpers" in preparing the patients/residents to leave;

gathering their clothing, necessary belongings, patient records, and medications; allaying their fears, anxieties and bewilderment; treating those who suffer shock and "transfer trauma"; and simply helping individuals with movement impairments onto the buses, vans, and ambulances. Without adequate emergency response plans for each special facility, there is no assurance that special facility staff can and will perform all these support and assistance functions. The implementing procedures for the drivers does not mention offering this assistance, nor is there any assurance that the drivers have the prior experience or training which would enable them to respond appropriately to a wide range of needs and difficulties which the residents will have in preparing to board and boarding the transport vehicles.

D. The implementing procedures for the special population liaisons are poorly drafted, vague, and confusing. For example, Pro-1.10 § 5.2.1 instructs the Special Population Liaisons upon arrival at the Staging Area to "proceed to your location as shown in Attachment 3, Layout of Staging area, of Implementing Procedure 3.2." The Attachment referred to is the NHY ORO Message Form, not the staging area layout, which is Attachment 5 of Pro-3.2. Moreover, the procedures for the Special Population Liaisons are set forth in two separate Implementing Procedures (1.10 and 2.7) which are neither identical nor sufficiently integrated with each other to ensure that confusion and mistakes will not occur.



E. In the event that a Special Population Liaison must perform her functions from the staging area, rather than at a local EOC, she must perform almost all her tasks using a commercial telephone which is shared with either a school liaison or a local EOC liaison. See Pro-3.2, Attachment 5. In either case, there is no reasonable assurance that the Special Population Liaison can and will be able to perform her functions in a timely manner given (1) the likelihood that all commercial telephone lines will be overloaded with phone calls during an emergency and (2) the fact that the phone itself will likely have to be shared with another individual whose functions are of vital importance, are performed almost solely on the telephone, and require almost constant telephone use during the same critical periods of the emergency when the Special Population Liaison will need a phone to perform her tasks.

F. If the Special Population Liaison calls a local EOC and learns that she will be admitted, she goes there. Pro-1.10 § 5.2.4; Pro-2.7, § 5.5.2. There is no assurance, however, that upon her admittance to a local EOC she will have timely access to a telephone to perform any of her functions or that, even if a phone is available to her in a timely fashion, the phone lines will not be overloaded and unavailable.

G. The Implementing Procedures do not make it clear what the Special Population Coordinator will tell the Liaisons to do when the Coordinator is informed that NHY's ORO has "recommended" a PAR to State or local officials but is awaiting

a response. The procedures for Special Population Coordinators and Special Population Liaisons do not differentiate clearly between a PAR which has been recommended by NHY's ORO but is not yet authorized (or rejected) and a PAR being recommended after having been authorized by State/local officials. If the SPMC contemplates sending buses to special facilities upon ORO's mere recommendation of an evacuation PAR to State/local officials, this would create a host of problems, especially if the State/local officials were to decide sometime later when the buses were loading to direct the population to shelter. If the SPMC does not contemplate that buses/ambulances would be sent upon the issuance by ORO of a mere PAR recommendation to State/local officials, it should clearly state this in the Implementing Procedures and eliminate this confusion.

H. The SPMC's reliance on the sixteen bus companies listed in Appendix M, pp. M-4, 5, to provide the drivers, vans and buses listed is unfounded. At least eight of the sixteen companies have either confirmed that they will not participate or that they will offer only the buses, vans and drivers that might be available, if any, at the time of an emergency. Thus, there is no reasonable assurance that a single bus, van or driver will be available from at least eight of the sixteen companies relied upon. The remaining companies do not have sufficient drivers and buses to transport all those persons in special facilities out of the EPZ in a timely fashion.

I. The SPMC significantly underestimates the number of ambulances and wheelchair vans needed. This stems, in part, from a failure to correctly identify the number of those needing more specialized transportation than regular buses can provide. Appendix M, p. M-16, indicates that the SPMC will be relying on 48 buses, 21 ambulances (or 6 evacuation bed buses) and 36 wheelchair vans to transport those in the special facilities identified. To meet the needs of this special population, a much higher percentage of ambulances and wheelchair vans is needed. Buses, especially school buses but coaches as well, are unsuitable modes of transportation for large numbers of those who are elderly or mentally retarded.

J. The SPMC states that evacuation bed buses "may be substituted for ambulances when patient care levels permit." Appendix M, p. M-16. There are no standards or procedures provided anywhere in the SPMC for having an ORO staffer make this judgment, nor are the Special Population Coordinators and Liaisons qualified to make it. If this judgment is left to the administrator of the special facility by the SPMC, most administrators of nursing homes will not permit the frail elderly or others who may be bedridden to be transported in bed buses, viewing it as too crude a method to ensure the patient's health and well-being. Instead, administrators will insist on evacuating these individuals in ambulances. As a result, the evacuation of special facilities will not be completed in a timely fashion.

K. The plans call for an insufficient number of ambulances to relocate all those in special facilities (non-hospitals) who need to be transported by ambulance in the event of an evacuation. In Appendix M, p. M-16, the SPMC calls for 21 ambulances to meet this need. Significantly more ambulances will be needed for this population.

L. The SPMC's reliance for a prompt response on the nine (9) ambulance companies listed in Appendix M, pp. M-138, 139, is unfounded. Six (6) of the companies cannot be relied upon at the time of an emergency to provide all or some of the ambulances indicated. In many instances this stems from an intent by company owners to honor existing prior commitments first before responding to a Seabrook evacuation. For some companies, no drivers have agreed to participate. One company has dropped out altogether, and another is out-of-business. Also, when it was enlisting the companies' participation, NHY appears to have: (1) stressed that it was extremely unlikely that the company would ever be called on to perform, and (2) glossed over the potential hazards the job entails, failing in some cases even to inform the owner that ambulances might be traveling into areas which were in or had been in the path of a radiation plume. There is no reasonable assurance that, in the event of an emergency, the ORO will be able to produce sufficient responding ambulances to evacuate those in special facilities in a timely fashion.

M. The SPMC's provisions offer no reasonable assurance that sheltering can or will be implemented appropriately or in a timely fashion in the special facilities. The SPMC contains procedures for having the Special Population Liaisons call the special facilities and read a prescribed "Special Population Protective Action Message." Pro-2.7, p. 14, Attachment 3. If sheltering is recommended the Liaison is to call and say: "Sheltering is the recommended action for your area at this time. Please implement your facility's sheltering procedures. Please take the following actions:

1. Close all doors, windows, and vents.
2. Turn off all fans, heating, and air-conditioning which use air drawn from outside.
3. Extinguish unnecessary combustion.
4. Use telephones for emergencies only.
5. Remain indoors until advised otherwise. Move to the basement or the room with fewest windows.
6. Keep radio or TV on for Emergency Broadcast System information.

Numerous problems exist with such a message. It assumes without any basis for doing so that the facility has its own sheltering procedures. For those facilities lucky enough to have such procedures, the message is contradictory and confusing: the facility is to implement its own procedures and "take the following actions." Some of these actions ("Move to the basement or the room with the fewest windows") may well be inconsistent with the facility's own plans. The message is also too rigid to encourage facility staff to use the appropriate judgement necessary about such critical matters as

turning off all fans, heating, and air conditioning in light of the needs of the frail elderly and handicapped population to be protected. For those facilities which have no sheltering plans, the message simply affords inadequate guidance on how to implement a timely, safe, and effective sheltering response. No specific TV or radio stations are mentioned for receiveing EBS information.

N. The SPMC contains inadequate provisions for the distribution of dosimetry and KI to those in special facilities whose immediate evacuation may be infeasible or very difficult. See Plan, p. 3.6-6. This policy does not meet the standards of NUREG 0654, Rev. 1, Supp. 1, Section J.10.e, because the provisions regarding quantities, storage, and means of distribution of KI are vague and confusing. Special population liaisons are to provide "information" about dosimetry and KI, Pro-2.7, § 5.5.4, but there is no assurance as to what this information will be or that the liaisons are knowledgeable enough to present the information adequately. There is also no assurance that enough KI will be available for all those in special facilities "whose immediate evacuation may be infeasible or very difficult." NUREG 0654, Rev. 1, Supp. 1, II.J.10e. Nor is there reasonable assurance that there will be enough Route Guides to deliver the KI requested.

CONTENTION 55: The SPMC proposes that individuals who have been evacuated from special facilities will be relocated to a single "host special facility" (the name of which is known to the Attorney General but cannot be made public pursuant to the Board's protective order). See Appendix M, at M-148 (which indicates one such facility).<sup>1/</sup> This special host facility contains a large auditorium, an arena, and miscellaneous space on two floors. The SPMC's plans for use of this facility do not provide reasonable assurance that this facility will be ready and available in a timely fashion in the event of an emergency or that, even if ready and available, it will be adequate or even lawful for use as a congregate care center for the number and kind of special needs individuals to be sent there. The SPMC therefore fails to comply with 10 CFR 50.47(a)(1), 50.47(b)(3), 50.47(b)(8), 50.47(b)(10), and NUREG 0654, Supp. 1, II A.3, II C.4, II J.10.d., and II J.10.g.

BASIS:

A. This facility is frequently used for a variety of special events including a circus, a rodeo, and a wide variety of "shows". There is no reasonable assurance that during such

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<sup>1/</sup> On p. M-151, the number of host special facilities is listed as "2", but the accompanying text ("Source/Basis") refers in the singular to "the special needs congregate care center." A single host special facility is identified in the Appendix M package of "proprietary information" received under the protective order. Thus, we presume that the reference to "2" on p. M-151 is either an error or an indication that NHY ORO is looking for, but has yet to find, another facility.



an event the facility can be converted in a timely fashion into a facility capable of meeting the relocation needs of nursing home residents, the mentally retarded, those in other special facilities, and the transport dependent population.

B. In Appendix M, p. M-18, the facility is noted as showing a capacity to handle 2,000 special facility and mobility impaired individuals. Given that the second floor of the facility is not serviced by an elevator, that much of the first floor will be serving simultaneously as the sole host school facility for over 9,000 school aged children, that parts of the first floor would be unsuitable as relocation space for those who are less than completely ambulatory, and that a large number of staff must also be present to assist and care for these special needs individuals, the maximum feasible number of special facility and mobility-impaired individuals who can be adequately cared for overnight in this facility is significantly less than 2,000. At the same time, the total number of special facility and mobility-impaired individuals who reasonably may need a place of relocation significantly exceeds 2,000, there are a number of special facilities in the EPZ which have not been identified in the SPMC, and the size of the mobility-impaired population has also been significantly underestimated. Furthermore, the plan assumes that only 80% of those individuals who are in special facilities or who are mobility-impaired will require overnight shelter. Appendix M, p. M-16. No basis is presented to support this assumption, and it is imprudent. In the event of an evacuation from the

six Massachusetts communities, when all the nursing homes, elderly housing projects, group homes for the mentally retarded, etc. are evacuated and transported to this host special facility, there are no public announcements, as there are for schools, instructing family members to pick up the residents of these special facilities at the host facility. The SPMC therefore ought to provide the means to shelter, feed, and appropriately care for all these individuals, not 80% of them. This number alone, when all special facilities are counted, exceeds 2,000 individuals. To this number should be added the mobility-impaired individuals who have been either bused out of the EPZ or who have engaged in ride-sharing to evacuate but have no place to stay. A prudent estimate would be that at least 2,500 special needs individuals would need care at this special host facility. Add to this the space needed to accommodate adequate staff and care-providers for this population and there is a need to accommodate at least 2,750 persons on a 24-hour basis at the host special facility, far more than the "capacity" of the space available.

C. There is no reasonable assurance that there will be sufficient, or indeed any, beds, blankets, food, or basic care available at the host special facility. The SPMC relies on the American Red Cross to establish and operate all congregate care centers, see Plan, § 2.4.2A. While the SPMC contains a mechanism to request a Red Cross response, Pro-1.6, there is no reasonable assurance that if contacted the Red

Cross can respond in time with sufficient staff and resources to turn this facility, possibly then housing a circus, rodeo, or other "show", into a special needs congregate care facility by the time evacuees arrive. Because it is the policy of the American Red Cross to engage in planning for nuclear power plant disasters only in concert with governmental planning efforts, the American Red Cross has undertaken no planning for its response in Massachusetts to a disaster at Seabrook Station. Thus, in the event of an emergency, the Red Cross can only respond on an ad hoc basis to provide emergency relief services in Massachusetts. In a recent letter to NHY, a senior official of the American Red Cross commented on the lack of State and local participation in the planning process in Massachusetts by stating:

There should be no doubt that without close coordination of Red Cross and government activities within the framework of tested disaster response plan, Red Cross relief efforts will be negatively affected.

The plan identifies 27 other congregate care centers for those without special needs, see Appendix M, pp. M-9 through M-12. Given responsibility for all these congregate care centers at once, there is no reasonable assurance that the Red Cross can and will respond in a timely manner, or at all, to provide the beds, blankets, food, or any other assistance needed at this special host facility.

D. There is no reasonable assurance that the thousands of special needs individuals who will end up at the

host special facility will be provided with the minimal level of medical care, special diets, and special personal attention (bathing, dressing, etc.) that they need to ensure their health and well being. There is no provision in the SPMC regarding who is to provide this special care. There is no assurance that nursing home owners will send sufficient staff to the host special facility to provide the special care needed by the infirm and frail elderly or those on special diets or medications, nor is there any provision which assures that the mentally retarded will be safely and appropriately cared for. The American Red Cross does not provide "special" care of this kind even when they are participating in planning for nuclear power plant disasters. Thus, there can be no presumption that they will do so on an ad hoc basis here. The SPMC is inferior to other plans which provide that those in nursing homes and other special facilities are relocated to other nursing homes and special facilities of the same kind where staff are trained and equipped to provide the kind of special care these evacuees would need.

E. Owners, operators, administrators, and staff of the special facilities have no assurance that the residents of their facilities can and will be adequately cared for at the special host facility upon relocation. They have not even been told the name of the special host facility to which their residents would be transported. If, at the time of an emergency, they are told that their residents are to be

transported to this site, most responsible owners, operators, administrators, and staff will resist, viewing the facility itself to be patently inadequate. For those who inquire what the plans are for caring for their residents at the facility upon relocation, those plans, if described accurately, will be viewed to be patently inadequate. Thus, regardless of the participation of State and local officials, most of those who operate and staff the special facilities will not permit those in their care to be relocated to this host facility. Instead, operators and staff will respond in an ad hoc fashion.

F. Because the SPMC provides no reasonable accommodation for the special relocation needs of those in special facilities who are qualified handicapped individuals, and thus defeats or substantially impairs the accomplishment of the relocation of these individuals, the plan as drafted cannot be implemented without violating a host of State and federal constitutional provisions, statutes, and regulations designated to protect individuals with handicaps, including Massachusetts Constitution amend., art. 114; and M.G.L. c. 12, §§ 11H and 11I. The Massachusetts Attorney General would likely seek to enjoin implementation of this aspect of the plan, regardless of the participation of other State and local officials.

G. Legal restrictions imposed by the locality in which this host special facility is situated prevent use of the facility in the manner called for in the SPMC. Among these

restrictions is one regarding the maximum number of persons permitted inside. At the height of the evacuation, when the facility is also serving as the host school facility, this legal limit would be exceeded.

H. The American Red Cross has not certified that this facility meets the criteria established by the ARC for mass care shelters to be used for evacuees from a nuclear power plant disaster. Absent certification by the American Red Cross, there is no reasonable assurance that the ARC will in fact establish this shelter during an emergency.

I. The facility does not meet the American Red Cross criteria for shelters for nuclear power plant disasters.

J. Regardless whether the facility meets the ARC generic shelter standards, the facility itself is not suitable for use as a host special facility for the population intended.

L. Use of this facility as a shelter for the elderly in nursing homes and elderly housing projects will be hazardous to the health and well-being of these individuals because it will substantially exacerbate the effects of the "transfer trauma" they will already be experiencing from the evacuation experience itself.

C. Special equipment should be provided to each household in the Massachusetts EPZ with a deaf or nearly deaf member. This equipment (a form of teletype) is not expensive and would insure notification to the hearing-impaired.

## Decision Criteria

CONTENTION 56: The SPMC does not establish or describe coherent decision criteria to be used by emergency decision-makers in formulating an appropriate protective action recommendation ("PAR") and otherwise fails to provide guidelines for the choice of protective actions consistent with federal policy. Thus, the SPMC does not meet the planning standards set forth at 50.47(b)(10) and NUREG 0654 II.J.10.m. and Appendix E, IV, A.4 and does not provide reasonable assurance that adequate protective measures can and will be taken. 50.47(a)(1).

### BASIS:

A. The SPMC adopts for consideration at the General Emergency level certain predetermined PARS which are totally inappropriate for the Seabrook site. See Pro-2.5, Attachments 1 and 2. The predetermined PARS are based solely on the monitored radiation levels within the containment during a General Emergency. If the "Post LOCA Monitor" is less than 5000 R/hr. then no predetermined PAR is used. If it is more than 5000 R/hr. but less than 10,000 R/hr. then a combined evacuation and sheltering order is given. If it is more than 10,000 R/hr. then evacuation only is recommended (assuming plume travel toward Massachusetts).



1. Predetermined PARS should not be based exclusively on containment monitors and readings. The EAL for General Emergency has many initiating conditions, several of which might indicate the need for a rapid PAR. There is no basis for using multiple indicators to declare a General Emergency but only one indicator as a basis for predetermined PARS.

2. Decision-makers should not wait until containment radiation reaches the prescribed levels before ordering PARS. There is no reason to do so and the margin of safety is only reduced as a consequence.

3. These predetermined PARS assume that sheltering (for non-beach areas) could never be superior to evacuation for areas within 5 miles. There is nothing in the SPMC to indicate that this is correct. In fact, the shielding factor assumed in the SPMC for shelters in Massachusetts is incorrect and is not reflective of the actual shielding that would be provided by most shelters in Massachusetts.

4. These predetermined PARS assume that radiation will be present in the containment before a PAR would be necessary. This is false. The need for immediate PARS could result from a containment bypass event.

5. These predetermined PARS are generally not adjusted to reflect the specific conditions of the site, including identification of areas where shelter is and is not available and where it is available, how adequate it may be.

6. If predetermined PARS are to be used, as NUREG 1210 indicates they should be for imminent or actual core damage accidents, then an adequate map must be prepared reflecting where shelters exist and in what quantities. Moreover, alternative predetermined PARS must be generated to reflect the great disparity in populations between seasons.

7. The predetermined PARS do not account for the likely wind-shifts that can be anticipated at this site.

8. The predetermined PARS fail to identify special conditions, i.e., entrapment, for which sheltering would be recommended.

B. The SPMC ignores the entrapment phenomenon described by NUREG 1210, V.4 at 19-20, which will occur at the Seabrook site during times of high beach population and also fails to adequately consider and plan for the possibility of entrapment due to bad weather, such as blizzards or flooding conditions.

C. The SPMC does not project doses correctly because it under-estimates doses from iodine and other ground deposited material, including failing to recognize in its dose calculations the increased risk from ground deposition as individuals await evacuation and the possibility of further increased dose from skin deposition and deposition on automobiles.

D. The SPMC totally ignores the protective action that combines sheltering with rapid identification after plume

passage of "hot spots" and relocation although this strategy is recommended by NUREG 1210 as appropriate for certain situations.

E. The SPMC does not consider non-radiological risks of evacuation in response to less severe accidents as compared to other protective measures which might be considered.

F. There is insufficient and untimely incorporation of meteorological data into PAR decision-making. Further, meteorological assumptions made are not appropriate for the Seabrook site and will result in inaccurate dose projections because they do not adequately reflect or account for features of shoreline meteorology, including the frequent change of wind direction and the phenomena associated with sea breezes along the coastline.

CONTENTION 57: PAR decision-making is over reliant on computer-generated dose assessment and the SPMC does not provide for a shift to, or demonstrate a capability to rapidly incorporate, real-time dose monitoring information as soon as possible after a release as recent federal guidance recommends. In addition, the default values used to assess doses (see Pro-2.2, at 36) underestimate the potential ratio of iodine to noble gases. In severe accident releases the values could be much greater and the default values would, therefore, result in incorrect dose projections. Thus, the SPMC does not meet the planning standard set forth at 50.47(b)(10).

CONTENTION 58: Under some circumstances the Seabrook Station Short-Term Emergency Director is responsible for initial decision-making and contacting the Governor of Massachusetts. Pro-2.14 at 3. However, his position and job description were created before the SPMC was formulated and the SPMC does not indicate whether this responsibility and the requisite knowledge and training have been incorporated into the Seabrook Station Radiological Plan. For this reason, the SPMC fails to meet the planning standards set forth at 50.47(b)(1), (2), (3) and (10) and the guidance of NUREG 0654 IIA., B., B., C. and J.

CONTENTION 59: The decision criteria described in the SPMC are not coordinated with those set forth in the NHRERP. Thus, the possibility exists for conflicting PARs being formulated, transmitted and recommended to the relevant State governments. The SPMC has no adequate procedures to prevent this and therefore does not meet the planning standards set forth at 50.47(b)(1) and (10) and the guidance of NUREG 0654 II.A. and J.

CONTENTION 60: The EALs described by the SPMC have not been discussed with or agreed upon by relevant State and local governmental authorities as required by 10 CFR Part 50, Appendix E, IV.B.

CONTENTION 61: Only a small handful of ORO personnel appear to be trained and qualified to make protective action recommendations, Pro-2.5 at 3, and only one individual is designated as having the responsibility to "formulate" these PARs - the Radiological Health Advisor ("RHA"). The RHA will not assume his responsibilities until arrival at the EOC and that arrival will be delayed because the RHAs live and work too far from EOC and will have to transit the EPZ to reach it. Pro-1.2 at 4, Appendix H at A.4. As a result, the SPMC does not meet the standards set forth at 50.47(b)(1), (2), (3) and (10); Appendix E, IV.A.4 and the guidance set forth in NUREG 0654 II.A.2; B; C and J.

CONTENTION 62: There is a lack of coordination between the EOF, the Seabrook Station Response Manager and those at the EOC who are responsible for formulating PARs. Pro-2.5. As a result, inconsistent PARs may be formulated and the SPMC does not meet planning standards 50.47(b)(1), (2), (3) and (10) and the guidance set forth in NUREG 0654 II.A.2; B; C and J.

#### Ingestion Pathway EPZ

CONTENTION 63: The SPMC fails to meet the planning standards set forth at 50.47(b)(1), (3), (9) and (10) and the planning guidance of NUREG 0654 II. A., C., I. and J. 11; FEMA

Guidance Memorandum IN-1 and FEMA REP-2, REP-12 and WINCO-1012 because the provisions, procedures and planning for the 50-mile ingestion pathway emergency planning zone are not adequate.

BASIC:

A. The SPMC makes no provision whatever for the prompt notification of the appropriate officials and agencies at both the State and local levels concerning the need for protective measures for the ingestion pathway EPZ. The SPMC does not identify the appropriate officials by title and agency and has failed to meet the requirements set forth in 10 CFR Part 50, Appendix E, IV, D, 1.

B. Adequate public information for the ingestion pathway EPZ has not been prepared or distributed nor have arrangements for its distribution been made. The prescribed messages set forth at Pro-2.13, Attachments 23 and 24 are misleading as to ascribed source and are otherwise not adequate.

C. The SPMC provides inadequate information as to the identity and location of food and milk producers and processors. Appendix L -- the Ingestion Pathway Data Base -- is not useful for this purpose.

D. Sampling procedures in the SPMC are inadequate and field samples will not be adequately gathered, recorded or tested thereby making timely and effective ingestion pathway PARs impossible. Pre-emergency planning for large scale sampling activities and the requisite data generation, collection and interpretation that results has not been done.

E. The SPMC ignores the family farm as a producer (and consumer) of milk. The number and location of such farms in the 50-mile zone are not identified. The SPMC does not establish prior to an emergency how and when food produced in the 50-mile zone is transported for processing and/or marketing.

F. The Sample Collection Teams are not adequately trained and the SPMC states that no experience is required for these positions. Plan 2.1-8. In fact, persons should be sought who reside within 20 miles of the plant, are familiar with the local areas and are already experienced in sampling procedures.



E. RESOURCES

CONTENTION 64: The SPMC fails to meet the planning standards set forth at 50.47(b)(1), (8) and (9) and the guidance of NUREG 0654 II.A.3. because there is no assurance that resources relied on in the SPMC will be adequate at the time of an emergency.

BASIS:

A. All letters of agreement and contracts entered into before January 28, 1988, the date on which PSNH filed for bankruptcy, are prima facie unreliable.

1. These contracts are executory under 11 U.S.C. § 365(a) and the debtor-in-possession, with Court approval, may assume or reject them. Either these contracts run between private suppliers and NHY -- a division of the bankrupt -- or the Seabrook Owners (with NHY functioning as "managing agent"). In the latter case, the 35% Lead Owner is a debtor-in-possession and its obligations under these agreements is individual up to its proportionate ownership share. To date, the Bankruptcy Court has not granted the bankrupt the necessary approval.

2. Similarly, funds to meet the obligations arising under these agreement may not be available. As a consequence, there should be a presumption that the private commercial suppliers may not be willing to continue these arrangements.

B. To the extent that the SPMC identifies and relies upon resources purportedly available to the State and local governments there can be no assumption that these resources are or will be adequate.

CONTENTION 65: The SPMC fails to meet the planning standards set forth at 50.47 (b)(1), (8), (9), (12) and (13) and the corresponding guidance of NUREG 0654 because adequate resources including personnel, facilities and equipment have not been secured to adequately respond to a radiological emergency at Seabrook Station. As a result, there is no reasonable assurance that adequate protective measures can and will be taken. 50.47(a)(1).

BASIS: The Applicant has acknowledged that because of the peculiarities of the Seabrook site, emergency protective measures contemplated by the SPMC may not actually protect the relevant populations from significant radiological harm and injury. (As noted supra, the Applicant draws no inference of planning inadequacy from these facts.) However, planning for decontamination and monitoring facilities, transportation of the contaminated injured, medical support and care and the entire range of basic services required to treat and deal with the potentially large number of injured ignores the fact that the SPMC is not, in the first instance, going to enable all or substantially all of the beach population to avoid doses causing severe health effects. Further, the initial protective

measures will also not substantially reduce life-threatening doses for many individuals. Having failed to prevent these health effects with an effective range of protective measures, the Applicant must adequately plan to handle the human health consequences.

### Facilities

CONTENTIONS 66: The facilities identified in the SPMC as the Emergency Operations Facility ("EOF") and the Emergency Operations Center ("EOC") are inadequate for the purposes required. As a result, the SPMC fails to meet the planning standards set forth at 50.47(b)(8); NUREG 0654 II.H.2. and 3 and Appendix E, IV, E, 8.

#### BASIS:

A. Both facilities should not be housed in the same building. No provision is set forth in the SPMC for back-up power in the event of the loss of power to these facilities. Such loss of power would effect both facilities simultaneously.

B. The Emergency Offsite Center is not accessible to Massachusetts State or local government officials during an emergency at Seabrook. The EOC is located at Newington, New Hampshire, approximately 15 miles north of Seabrook Station on the New Hampshire-Maine border. Interstate 95 passes within two miles of the station and the other two north-south secondary roads fall within the EPZ 10-mile arc. Personnel

from Massachusetts would be placed at maximum risk while trying to transit the EPZ to reach the EOC. Additionally, New Hampshire authorities may be in the process of evacuation and enforce access control which would prevent Massachusetts local authority representatives from transiting the EPZ to reach the EOC.

CONTENTION 67: The facility identified as a Staging Area located in Haverhill at 145-185 Water Street is not now available to the ORO for this purpose and no other facility has been identified. The City of Haverhill on February 26, 1988 issued a Cease and Desist Order as to all uses of the premises as a Staging Area based on violations of the City of Haverhill Zoning Code, § 255.13. In April, 1988, the Superior Court of the Commonwealth entered a temporary restraining order prohibiting any further use of these premises for the purpose. In light of the function and role of the Staging Area in the SPMC, the absence of any identified lawful location for such a facility makes the effective implementation of the SPMC impossible and the SPMC fails to meet the standards set forth at 50.47 (b)(8) and NUREG 0654 II H.4.

CONTENTION 68: The Media Center located at the Town Hall, Newington, New Hampshire is improperly sited and timely access by Massachusetts State and local public information personnel would be impossible because to reach that location in a timely

fashion the entire Seabrook 10-mile plume exposure EPZ would have to be crossed. Thus, the standards set forth in 50.47(b)(7) and (8) and NUREG 0654 II. G. and H.4 have not been met.

CONTENTION 69: The SPMC relies upon the American Red Cross to establish and operate all 27 congregate care centers and the host special facility, yet it does not contain any kind of written agreement with the American Red Cross which identifies the emergency measures to be provided in Massachusetts and the mutually acceptable criteria for their implementation. The SPMC therefore fails to comply with 10 CFR 50.47(a)(1), 50.47(b)(1), 50.47(b)(3), 50.47(b)(8), 50.47(c)(1) and NUREG 0654, Rev. 1, Supp. 1, II.A.3, II.C.5, and II.H.4.

BASIS: Because it is the policy of the American Red Cross to engage in planning for nuclear power plant disasters only in concert with governmental planning efforts, the American Red Cross has undertaken no planning for its response in Massachusetts to a disaster at Seabrook Station. It has therefore not entered into any agreement of any kind with NHY or the Joint Owners to provide any services. In the event of an emergency at Seabrook Station, the American Red Cross response would be at best ad hoc. Such a response does not provide reasonable assurance that any of the congregate care centers or the host special facility will be operated by the American Red Cross or that, if the Red Cross does act to

establish mass care centers in Massachusetts, it can be done in a timely fashion.

### State Resources

CONTENTION 70: The SPMC fails to provide adequate arrangements for requesting and effectively using assistance and resources that are purportedly available to the State and local governments. Plan 5.3-1.<sup>±/ö</sup>

The SPMC claims that State and local emergency facilities are described for informational purposes only and that implementation of the utility plan does not rely on these facilities. Plan 5.3-1. This is doubly incorrect. First, only if the SPMC were to be implemented in Mode 2 with ORO authorized to perform the entire response would these State and local facilities not be relied upon expressly for plan implementation. Second, even in that Mode, the existence of adequately staffed and mobilized local EOCs is assumed. Plan 2.1-21, -22.

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Adequate emergency facilities and equipment are not provided and maintained by State and local governments for an emergency at Seabrook. Thus the SPMC has not met 50.47(b)(3) and (8) and a reasonable assurance finding under 50.47(a) cannot be made.

### BASIS:

A. The SPMC identifies the Massachusetts State EOC at Framingham and claims that it "could be used to provide support in the event of an emergency at Seabrook Station, just as it might be used for response provided to an accident at any other nuclear generating station affecting the state." Plan 5.3-1. This statement is false. No current planning exists that would coordinate the state EOC and the response of the local

communities to a Seabrook emergency. The State Area I EOC in Tewsbury is also inadequately staffed for a radiological emergency at Seabrook. There are inadequate maps, communication lines and other materials and information at the Area I EOC to provide a response to a radiological emergency at Seabrook.

B. The local EOCs in the 6 Massachusetts communities are not adequate to handle a radiological emergency at Seabrook. These EOCs are inadequately staffed for such a contingency and do not have the communications links necessary, either between themselves or with the ORO EOC to provide any emergency support for such an accident.

C. No other planning has been done to coordinate other resources available to the state, such as laboratory facilities, and make these resources available in a timely and effective manner in the event of an emergency at Seabrook.

D. The SPMC asserts that the Massachusetts State Police will notify appropriate State and local emergency personnel upon notification from the ORO and/or Seabrook Station concerning a radiological emergency. However, no prior coordination or planning to deal with a Seabrook emergency has been done with the State Police. Moreover, the SPMC assumes the State Police will follow an emergency plan not even before the Board. No liaison for the State Police is provided by the SPMC although the State Police is considered by the SPMC to be an emergency response organization.



## Private Resources

CONTENT 171: The SPMC fails to provide reasonable assurance that an adequate number of buses, vans and drivers can and will respond in a timely fashion to evacuate hospitals, special facilities, schools, day care/nurseries and the remaining transit-dependent or mobility-impaired population. Therefore, the SPMC violates 10 CFR 50.47(a)(1), 50.47(b)(1), 50.47(b)(3), 50.47(b)(10), 50.47(c)(1) and NUREG 0654, Rev. 1, Supp. 1, II.A.3., II.C.4., II.C.5. and II.J.10.

### BASIS:

A. The SPMC's reliance on the 16 bus companies listed in Appendix M, pp. 4, 5, to provide the drivers and buses listed is unfounded. At least eight of the 16 companies have either confirmed that they will not participate or that they will offer only the buses, vans and drivers that might be available, if any, at the time of the emergency. Thus, there is no reasonable assurance that a single bus, van, or driver will be available from at least eight of the 16 companies relied upon. The remaining companies do not have sufficient drivers, buses and vans to evacuate the transport-dependent/mobility-impaired population and all those in hospitals, special facilities, and schools, and daycare/nurseries who need bus/van transportation. This number is larger than the SPMC estimates.

B. The SPMC provides no reasonable assurance that the buses and drivers which will be participating can be mobilized quickly enough to ensure a timely response. First, many of the companies are located at substantial distances from the EPZ. Second, the SPMC's procedures in Pro. 2.10 for notifying bus companies, determining the availability of buses and drivers, assigning particular buses to particular bus needs, assigning Bus Dispatchers, Route Guides, and Dosimetry Recordkeepers, and sending these ORO staffers off to the assigned bus yards is designed for a slow-breaking radiological emergency. These procedures are too cumbersome and time-consuming to ensure a timely response in a fast-breaking accident. Third, by dispatching Bus Dispatchers, Dosimetry Recordkeepers, and Route Guides to bus yards to assemble and brief the drivers, to distribute dosimetry and Bus Driver Packets, and to lead ~~the~~ in convoy-style the company's full contingent of responding buses, see Plan, § 3.6.1(B), the SPMC ensures that each company can respond only as fast as either its last responding bus driver or the ORO bus yard team, whomever arrives at the bus yard last. This is an extremely inefficient, "weak-link" system. Moreover, convoys of buses always travel more slowly than individual buses do, and convoys will have a much more difficult time traveling into the EPZ against evacuating traffic than single buses would.

CONTENTION 72: The SPMC fails to provide reasonable assurance that an adequate number of ambulances, wheelchair vans, and drivers can and will respond in a timely fashion to evacuate all those who reasonably may need transport by ambulance or wheelchair van during a radiological emergency. Therefore, the SPMC violates 10 CFR 50.47(a)(1), 50.47(b)(1), 50.47(b)(3), 50.47(b)(10), 50.47(b)(12), and NUREG 0654, Rev. 1, Supp. 1, II.A.3, II.C.4, II.J.10(d), II.J.10(g), and II.L.4.

BASIS:

A. The SPMC relies on nine (9) private ambulance companies to provide all the ambulances and wheelchair vans needed to evacuate all those who reasonably may need to be transported by such vehicles during a radiological emergency. This includes all persons in the two EPZ hospitals, the special facilities, and the mobility-impaired transport dependent population who need such vehicles in order to evacuate and relocate. Also needing ambulances will be those who are injured during the emergency, either by natural events, auto accidents, and the like or by radiation. Of these nine companies, indicates that one is out of business and a second has **dropped** out after finding that its drivers would not agree to participate. One company which had agreed in a letter of agreement to provide four ambulances can provide reasonable assurance of providing only two in an emergency. Another which had a letter of agreement to provide three ambulances entered

into a contract to provide only two. One company actually believes it could provide 22 ambulances and 12 wheelchair vans, but these vehicles are based all over the state and the company has received no assurances yet from its drivers; so there is no reasonable assurance that it can and will provide any vehicles/drivers in an emergency in a timely fashion. Another company with a letter of agreement to provide ten ambulances, five wheelchair vans, and two critical care units claims to have only 9 vehicles, not 17, and has agreed to make these available only on an "as available" basis if its drivers will participate, which it thinks is unlikely. The remaining three companies have agreed to provide a total of six ambulances/driver teams and three ambulettes/driver teams, but the ambulettes are not licensed in Massachusetts and cannot be used there.

B. In seeking to enlist the participation of these ambulance companies and their drivers, NHY led at least some of the companies and drivers to believe that they would not be driving into areas close to Seabrook Station which were radiologically contaminated. This was done through a combination of active misrepresentation and critical omission of facts regarding what kinds of individuals might need ambulance services and where they would be located. Thus, there is no reasonable assurance that even those ambulances/driver teams that do respond during an emergency will drive into radiologically contaminated areas or handle

radiologically contaminated individuals. To the extent that contracts can be construed to require such services, these contracts were obtained using unfair or deceptive trade practices in violation of M.G.L. c. 93A, § 2, and are unenforceable.

CONTENTION 73: The SPMC fails to provide reasonable assurance that an adequate number of tow trucks and drivers can and will respond in a timely and adequate fashion on a 24-hour basis to clear disabled vehicles from evacuation routes. The SPMC therefore fails to comply with 10 CFR 50.47(a)(1), 50.47(b)(1), 50.47(b)(3), 50.47(b)(10) and NUREG 0654, Rev. 1, Supp. 1, II.A.3, II.C.4, II.C.5, and II.J.10.K.

BASIS:

A. The NHY ORO does not rely on an adequate number of tow trucks to enable all potential road obstructions to be removed in a timely fashion. In Appendix M, p. M-3, there are only four road crew (tow) companies listed. For these companies, Appendix M lists a total inventory of 31 tow vehicles. Even if all these vehicles could respond, there would not be sufficient tow vehicles to remove all the road impediments in a timely fashion that can reasonably be expected during an evacuation of the entire EPZ in Massachusetts. These impediments will occur because of the many automobile accidents, vehicles overheating and stalling, vehicles running out of gas, and vehicles abandoned during an evacuation. Many more tow trucks are needed.

B. The SPMC's reliance on the four road crew companies listed in Appendix M is unfounded. Two of the companies have dropped out of ORO altogether and will not respond in an emergency. A third company will not renew its agreement to participate after the first year, and even now cannot provide reasonable assurance that its drivers will show up in the event of a radiological emergency. The final company (two tow trucks) can give no reasonable assurance that it would respond and feels that it is under no contractual obligation to do so.

C. Even assuming that tow trucks are available to respond, the SPMC deploys only two tow trucks per town, assigning them both to the "transfer point." Pro. 2.10, § 5.4.7(B). Thus, at most, a total of only 12 tow vehicles will be deployed throughout the six Massachusetts communities. This is far short of the number needed to clear the evacuation routes of all reasonably anticipated blockages in a timely fashion.

D. The method utilized by the SPMC for surveillance for road blockages is not adequate to ensure that road blockages will be identified promptly enough to dispatch tow trucks to remove them in a timely fashion. Route Guides assigned to buses are to "report any obstacles, stalled cars or other impediments by radio." Pro. 2.10, Attachment 3. Route Guides for the hearing impaired are to report "obstacles, stalled cars or other impediments to traffic flow." Pro. 2.11,

Attachments 3. Also, Traffic Guides are to report "if traffic is blocked or if there is no evacuating traffic." App. J, p. J-3. Route Guides in buses, however, will not arrive for many hours into an evacuation, and when they do arrive their routes do not take them along all the key evacuation links. Indeed, bus routes seek to avoid the most heavily traveled evacuation routes. So Route Guides in buses will not provide an effective means of surveillance for road blockages. Route Guides for the hearing impaired, similarly, will likely avoid travel along major evacuation links, and they are not out in sufficient numbers nor throughout the full duration of an emergency. Stationary Traffic Guides are even less effective. Most of the many miles of key evacuation roads will not be visible to them, especially at night.

E. The communications procedures for dispatching tow vehicles from the "transfer points" once road blockages have been spotted by Route Guides or Traffic Guides is too cumbersome to provide reasonable assurance of a timely response. Route Guides for the hearing impaired report blockages to the Evacuation Support Dispatcher. Pro. 2.11, Attachment 3. Route Guides in buses going to schools and special facilities report blockages to the Staging Area Leader, but Route Guides in buses assigned to "transfer points" report blockages to the Transfer Point Dispatcher. Pro. 2.10, Attachment 3. Traffic Guides report blockages to the Evacuation Support Dispatcher. App. J, p. J-3. Thus, three



separate ORO personnel receive reports of road blockages. Only the Transfer Point Dispatcher, however, is authorized to dispatch tow trucks to an impediment. Pro. 2.10, Attachment 8. Thus, unnecessary communication is generated which impairs an efficient dispatch of tow trucks.

CONTENTION 74: The SPMC contains no provision for snow removal on the evacuation routes. Therefore, the SPMC violates 10 CFR 50.47(a)(1), 50.47(b)(1), 50.47(b)(3), 50.47(b)(10), and NUREG 0654, Rev. 1, Supp. 1, II.A.3, II.C.4, II.C.5, and II.J.10.k.

BASIS:

There is no provision in the SPMC for snow removal on the evacuation routes. One private snow removal company has been listed as an emergency resource in Appendix M, p. M-8, but this company has contracted only to remove snow from the Staging Area and will not plow inside the EPZ in an emergency. It may not even plow the Staging Area unless it is paid the money it is owed from plowing last winter for PSNH/NHY. There is no reasonable assurance that snow removal can or will be provided by the local communities in their normal fashion during an emergency or that if it can be provided the roads will be plowed in a timely manner at regular intervals. Absent adequate provisions for snow removal, an evacuation during snow storms cannot be reasonably assured. Thus, there is no "range of protective actions" for EPZ residents, workers, and visitors during snow storms.

## Federal Response

CONTENTION 75: The SPMC fails to provide adequate arrangements for requesting and effectively using Federal assistance resources and does not comply with 50.47(b)(3) and NUREG 0654, II. C. 1.a., b. and c.

### BASIS:

A. The SPMC simply asserts that the Federal government will respond to an emergency when a "regulated entity such as Seabrook Station, requests Federal support, or when Federal agencies must respond to meet their statutory responsibilities." Plan 2.3-1. However, the SPMC points to no legal authority to support these claims.

1. The Federal Radiological Emergency Response Plan ("FRERP") is designed to provide federal assistance to State and local governments. 50 Fed. Reg. 46542 (November 8, 1985). The FRERP recognizes that "State and local governments have primary responsibility for determining and implementing any measures to protect life, property and the environment in any areas not within the boundaries of a fixed nuclear facility or otherwise not within the control of a Federal agency." Id. 46544. It is unclear whether, absent a request from the relevant State or local government, the FRERP can be activated or that the participating federal agencies would provide assistance. The SPMC makes no provision for obtaining authority from the Commonwealth to make such a request. See Plan 2.3-2.

2. There is no indication in the SPMC whether any of the 12 Federal agencies participating in the FRERP "must respond to meet their statutory responsibilities."

B. The SPMC also asserts that federal agencies will respond directly "in accordance with established plans and procedures or preexisting relationships." Plan 2.3-1. The SPMC then makes reference to three Federal agencies, the U.S. Coast Guard, the Federal Aviation Administration and the Department of the Interior ("DOI"). The SPMC, however, fails to reference either established plans or procedures or any preexisting relationships pursuant to which these agencies would respond to a Seabrook emergency in the manner relied upon in the SPMC. Moreover, the FRERP indicates that DOI is to coordinate its emergency response with State and local governments. 50 Fed. Reg. 46562.

C. Lessons learned from exercises of the FRERP conducted at the Zion nuclear facility in June, 1987, indicate that responsible emergency organizations (there the State and local governments) should meet and plan adequate interfaces with the NRC to insure effective use of FRERP Federal assistance. No such provisions for meetings between the NRC and the ORO are contemplated by the SPMC.

D. The Lessons learned from the exercise of the FRERP conducted at the Zion facility in June 1987 indicate that the estimate of 3 to 8 hours for a federal response at Plan 2.3-2 is totally unrealistic and that 24 to 48 hours would be more reasonable.

E. Some of the responsibilities attributed to federal agencies at Plan § 2.3.3 exceed both the FRERP and the policy of these individual agencies. Some of the federal support options identified would be available only in light of a Presidential Disaster Declaration which FEMA has resisted in the past for radiological emergencies.

F. The ORO is totally unprepared to effectively interface with these Federal agencies in the event of an actual emergency. Monitoring and dose assessment information provided to the NRC by the Department of Energy during the Zion exercise of the FRERP in June 1987 overwhelmed the capacities of the NRC. The SPMC has no procedures for effectively integrating this Federal resource into the ORO's response. The SPMC does not provide the practical information needed to assess whether communication links and other forms of interface between ORO and the Federal agencies will even be possible during an emergency. See NUREG 0654 II.C.1.c.

#### Medical Resources

CONTENTION 76: The SPMC fails to meet the planning standard set forth at 50.47(b)(12) and the guidance of NUREG 0654 II.L. because it fails to provide adequate arrangements for medical services for the contaminated injured individuals. In light of the candid acknowledgment by the Applicant that emergency planning at Seabrook does not provide any particular

level of protection to the summer beach populations in the event of a serious fast-paced accident, the SPMC should provide sufficient medical services to treat and care for those who were neither able to shelter or evacuate and as a result suffer contamination injury. As the Atomic Safety and Licensing Appeal Board has stated: "Thus, for a serious nuclear accident to result in the hospitalization of large numbers of people, not only must an already unlikely accident be serious [sic], but also the emergency response to protect the public must be ineffectual." Southern California Edison Company (San Onofre Nuclear Generating Station, Units 2 and 3), 16 NRC 127, 138 (1982).

BASIS:

A. The SPMC asserts at Plan 3.8-2 that "medical emergencies" that arise in the course of an emergency response will be handled by Emergency Medical Services ("EMS") "established in local communities." These EMS are not otherwise identified and no agreement between the ORO and these organizations exist.

1. Local communities in the Massachusetts plume exposure EPZ have extremely limited emergency services. Many of the communities contract out for these services with companies that serve other non-EPZ towns. As such, these EMS are not available to the towns during a Seabrook emergency.

2. Many of the EMS personnel are voluntary and auxillary and would not be available during a radiological

emergency in the absence of any agreement because of prior commitments.

3. EMS personnel are not trained to respond to or deal with radiological emergencies.

### Personnel

CONTENTION 77: The SPMC fails to provide for the adequate or continuous staffing of ORO personnel to maintain or sustain an emergency response. For these reasons, the SPMC fails to meet the standards set forth at 50.47(b)(1), (2), and (5), and the regulatory guidance established by NUREG 0654 II. A.1.e.4., B, and E.2.

#### BASIS:

A. The SPMC does not provide for the capability of continuous operations for a protracted period of time. Personnel are required to report to staging areas at a Site Area Emergency; however, the SPMC fails to specify the number of personnel in each response category who are required to report on first shift, fails to identify adequate mechanisms for providing second shifts and backup personnel, fails to identify mechanisms for instructing contract personnel as to which shift they should report for, and fails to provide assurance of continuity of personnel from the contracted companies.

B. The NHY Offsite Emergency Response organization fails to provide adequate staffing for evacuation specific positions. The SPMC states "evacuation specific positions will have one compliment only with additional personnel (at least 20%) available as backup as noted on Figure 2.1-1." Plan 2.1.1. The justification for only providing a single shift for these positions is stated as "If an evacuation is required, the functions will be performed over a relatively short period of time as opposed to the entire emergency situation which may last for a protracted period." The justification is flawed in that implementing procedures require these positions to be staffed at the Alert and Site Area Emergency declarations. The time between call out of personnel and deployment to execute evacuation support duties may be many hours or even days. Since these positions must be available to execute protective actions at any time from declaration of an Alert to termination of the emergency situation, alternate shifts must be available to provide evacuation support capability during an "emergency situation which may last for a protracted period."

C. The SPMC proposes to fill the senior management positions of the ORO with experienced management personnel from the utility's staff. Assuming that the utility has been prudent in its day-to-day non-emergency staffing, the assignments provided for in Section 2.1.1 represent additional staff requirements. Failure to indicate, at least by position, title and organization, the source for the staffing of these



positions leaves serious doubt that such staffing will be accomplished without detriment to normal onsite emergency operations. Further, the availability and capability of such personnel is unclear. Delays can be expected in their response to requests for assistance. The SPMC fails to provide assurance that the staffing of offsite positions will not be accomplished at the detriment of onsite emergency operations. It further fails to provide sufficient detail to provide reasonable assurance of responsive 24-hour operating capability, as required in NUREG 0645, Supp. 1, Section II.A.1.e. and II.F.1.a.

D. The ORO staffing lists in Appendix H indicate that there are fewer staff available for some positions than will be reasonably necessary on a 24-hour basis during a protracted emergency, especially for such positions as Route Guides, Traffic Guides, Dosimetry Record Keeping, Reception Center Staff and Reception Center Monitoring/Decontamination.

E. Because of fear of radiation and its health consequences, many utility company employees who have volunteered to be on an ORO staffing list will not show up or will show up in less than a timely fashion in the event of a serious radiological emergency at Seabrook Station. Because of the corporate culture in the utility industry, these utility company employees believe either that there will never be a serious radiological emergency at Seabrook Station or that such an event is extremely unlikely. Thus, they view their

commitment to ORO as a paper commitment designed to assist Seabrook Station in obtaining an operating license. Were a serious radiological emergency to occur, however, the belief system of these workers would be shattered along with this commitment. There is no reasonable assurance that these non-professional emergency workers will show up to fulfill their ORO responsibilities in a serious radiological emergency. Moreover, of those workers who do show up, many will do so late. They understand that there is a disadvantage in showing up quickly in that the first responders will be assigned to priority tasks which, generally, are those performed at locations in or close to the areas of greatest radiological risk. Thus, for example, the first responding traffic guides will more likely be sent to an intersection close to Seabrook Station or in an area in the path of a radiological plume than to an intersection on the periphery of the EPZ or in a safe upwind location. The SPMC thus contains a dangerous disincentive for certain categories of ORO workers to show up sooner rather than later. This is a disincentive which would not exist for local emergency workers were they to respond. A Salisbury police officer, for example would know that he will be directing traffic in Salisbury rather than on the EPZ periphery, regardless of when he shows up.

F. Many of the ORO staffers listed in Appendix H cannot be reached at the business numbers listed, and it appears that many have changed jobs and left positions at New

Hampshire Yankee and Public Service Company of New Hampshire. This is not surprising, given the precarious financial condition of the company. Many ORO workers are actively seeking other employment and will leave as soon as they can. Given the high rate of turnover at NHY/PSNH, there is no reasonable assurance that ORO can and will be able to staff its ranks fully during a radiological emergency. In addition, because it is the most competent and qualified workers who tend to find jobs elsewhere, over time NHY/PSNH worker competence and qualifications will decline.

CONTENTION 78: There is no reasonable assurance that there will be adequate second shift manpower capability for certain evacuation-specific positions. Therefore, the SPMC fails to comply with 10 CFR 50.47(a), 50.47(b)(1), 50.47(b)(15) and NUREG 0654, Rev. 1, Supp. 1, II.A.4. and II.0.

BASIS:

A. Given the length of time that it could reasonably take to evacuate the general population, special facilities, hospitals, schools, day care/nurseries, and the transit-depend/mobility-impaired population, there is no reasonable assurance that an evacuation can be completed within one shift. The SPMC, App. H provides the names of no second shift personnel for the NHY ORO for the evacuation-specific positions of Traffic Guides, Monitoring/Decontamination Personnel and Reception Center Staff. Instead the plans

asserts that NHY ORO will request second-shift manpower assistance from Yankee Atomic Electric Company pursuant to a mutual assistance plan. Plan, § 3.2.2, p. 3.2-9. There is no reasonable assurance, however, that during a radiological emergency at Seabrook Station which is serious enough to warrant a second shift for these evacuation-specific positions, enough volunteers can be recruited by Yankee Atomic to fill all such positions. This is not to be confused with role abandonment, because these workers did not previously have assigned emergency roles to fulfill. They simply will not volunteer in sufficient numbers or in a timely fashion during a radiological emergency.

B. There is no assurance that the Yankee Atomic volunteers who do show up for second-shift duty will have received adequate training. There is no indication in the SPMC that these workers will have received job-specific pre-emergency training. The SPMC merely instructs the first-shift evacuation-specific workers to give the second-shift volunteers a "thorough briefing" upon their arrival. See, e.g., App. J, p. J-3 (Traffic Guide Procedures). Such on-the-job training during an emergency, offered by first-shift workers who want to minimize dose consequences by getting out of the EPZ as quickly as possible, is very likely to be inadequate. Thus, there is no reasonable assurance that these second-shift workers will have the capability of performing their assigned tasks in the proper manner.

CONTENTION 79: The prerequisite experience required for qualification to hold numerous critical ORO positions, and the training provided by the SPMC for these positions, is inadequate to provide reasonable assurance that ORO can and will implement adequate protective measures in the event of a radiological emergency at Seabrook Station. Therefore the SPMC fails to comply with 10 CFR 50.47(a)(1), 50.47(b)(1), 50.47(b)(14), 50.47(b)(15), NUREG 0654, Rev. 1, Supp. 1, II.A, II.N, II.O.1 and II.O.4.

BASIS:

A. The SPMC fails to provide adequately qualified personnel to manage the NHY emergency response organization. Section 2.1.1 states:

Prerequisite experience as a Vice-President or Director is required for training and qualification as a NHY Offsite Response Director.

As the director of a civil emergency response organization, the Offsite Response Director is required to make decisions concerning the lives and health of the general public; he is required to make decisions which place at risk the lives of institutionalized persons or mobility impaired persons; he is required to make decisions on crowd control, panic control or riot control. The position of senior manager of a business office does not provide the training skills or experience required to make prudent emergency management decisions. The training provided by the SPMC (see Plan, Table 6.3-1) is not adequate to compensate for this deficiency.

B. The SPMC, Section 2.1.1, p. 2.1-11 (Amend. 3)

states:

Prerequisite experience is not required for training and qualification as Reception Center Monitoring/Decontamination Personnel.

The responsibilities of this position are to monitor and decontaminate evacuees and vehicles that arrive at the Reception Centers. Since the Monitoring/Decontamination Personnel are dealing directly with the public, it is imperative that they have past experience and training in Health Physics and methods used for the monitoring of and the removal of contamination from personnel and vehicles. The training provided by the SPMC (see Plan, Table 6.3-1) is inadequate to compensate for this deficiency.

C. The SPMC identifies the experience required for two (2) Assistant Offsite Response Directors (one for Response Implementation and one for Support Liaison). Prerequisite experience as a director or manager is required to fill these positions. Plan, 2.1.1, p. 2.1-5 (Amend. 3). The position of senior manager of a business office does not provide the training skills or experience required to direct the mobilization of emergency offsite personnel and the logistics therewith (i.e., bus coordination, traffic control, traffic guides, access control, etc.). The training provided by the SPMC (see Plan, Table 6.3-1) is inadequate to compensate for this deficiency.

D. The SPMC identifies the qualification requirements for the Technical Advisor as "knowledge of the plant operations and systems." Plan, 2.1.1, p. 2.1-5 (Amend. 3). The plan fails to address such qualifications as a professional degree, STA qualifications, number of years of nuclear plant experience and number of years experience at the Seabrook facility. In addition, there is no indication that training in communication skills is required nor is there any requirements for training in the presentation of technical material to non-technical personnel. The training provided by the SPMC (see Plan, Table 6.3-1) is inadequate to compensate for this deficiency.

E. The SPMC identifies the qualification requirements for the Radiological Health Advisor as "a radiological Department Manager." Plan, 2.1.1, p. 2.1-6 (Amend. 3). The Plan fails to address such qualifications as a professional degree, certification as a Health Physicist, and quantitative experience to enable decision-making where the health and safety of the general public is concerned. Such experience should include the demonstrated ability to deal with Protective Action Guidelines and Recommendations, Contamination Control, Dose Assessment, etc. The training provided by the SPMC (see Plan, Table 6.3-1) is not adequate to compensate for this deficiency.

F. The SPMC identifies the qualification requirements for the Accident Assessment Coordinator as a "Supervisor or worker in Radiation Protection." A Health Physics background



by itself is insufficient qualification for this position. The Accident Assessment Coordinator needs to have quantitative experience in formulating actions to be taken in the event of an evacuation of the EFZ, must understand Protective Action Guidelines and Recommendations, must possess a professional degree, and must possess certification as a Health Physicist. The training provided by the SPMC (see Plan, Table 6.3-1) is not adequate to compensate for this deficiency.

G. The SPMC identifies the qualification requirements of Field Monitoring Teams as "experience as a radiological worker." Plan, 2.1.1, p. 2.1-8 (Amend. 3). The Plan fails to quantify the experience and training needed to perform the tasks involved in field monitoring. Emergency Field Monitoring Teams need knowledge in health physics monitoring techniques, local geography and topography, and communications as a minimum. Using a two-way radio to report readings back to Seabrook Station Offsite Monitoring Coordinator is a critical part of the field monitoring teams function; however, training in such communication skills is not addressed in the Plan. The training provided by the SPMC (see Plan, Table 6.3-1) is not adequate to compensate for this deficiency.

H. The SPMC identifies the qualification requirement for the Reception Center Coordinator as "experience as a Supervisor." Plan, 2.1.1, p. 2.1-11 (Amend. 3) The Plan fails to quantify the experience and training needed to perform the tasks involved with this position. The Reception Center

Coordinator is responsible for overseeing the operation of both of the reception centers, which involves the complex logistics of receiving potentially tens of thousands of traumatized evacuees, tending to their immediate needs, registering them, coordinating a Message Center, and coordinating referrals to congregate care centers. The training provided by the SPMC (see Plan, Table 6.3-1), is not adequate to compensate for this deficiency.

I. The SPMC identifies the qualification requirement of the Reception Center Leader as "experience as a Supervisor." Plan, 2.1.1, p. 2.1-12 (Amend. 3). Although this position gets direction from the Reception Center Coordinator, the Reception Center Leader must still activate and operate a Reception Center and perform many functions independent of the Coordinator. The Plan fails to quantify the experience and training needed to perform functions that are essential, similar to those of an American Red Cross Crisis Manager. The Leader is responsible for organizing, activating and operating the Reception Center for potentially tens of thousands of traumatized evacuees. The training provided by the SPMC (see Plan, Table 6.3-1), is not adequate to compensate for this deficiency.

J. The SPMC states that "[p]rerequisite experience in public information is required for training and qualification as a Public Notification Coordinator." Plan, 2.1.1, p. 2.1-13 (Amend. 3). The Public Notification Coordinator is responsible

for a timely and coordinated activation of the Public Alert and Notification System, development of appropriate EBS messages, and coordination of EBS messages with New Hampshire and Massachusetts. The Plan fails to address such qualifications as a professional degree, knowledge of the research record regarding the characteristics of good and poor emergency information, prior experience in drafting emergency warnings, knowledge of human behavior in emergencies, etc. The training provided by the SPMC (see Plan, Table 6.3-1) is not adequate to compensate for this deficiency.

K. The SPMC states that "[p]rerequisite experience as a Security Force member is required for training and qualification as a NHY Offsite Response EOC Contact." Plan, 2.1.1, p. 2.1-20. This position, however, involves a great deal more than security at the NHY Offsite Response EOC prior to an emergency. This person will receive initial notification of the declaration of an emergency from Seabrook Station and has a very complex procedure to perform in conducting the initial notification of the NHY ORO. See Appendix G. In addition, he is responsible for activation of the Public Alert and Notification System until relieved by the Communication Coordinator. This is a very critical position in the event of a rapidly escalating emergency. The prerequisite for this position must include a high level of education, substantial communications and emergency management experience, and a knowledge of dose consequences and plant technical

information. See, e.g., Attachment 2 to Appendix G, which the Offsite Response EOC Contact must complete. The training provided by the SPMC (See Plan, Table 6.3-1) is inadequate to compensate for this deficiency.

L. The SPMC identifies the qualification requirements of the Communication Coordinator as "experience in management and communications." Plan, 2.1.1, p. 2.1-17. The plan fails to quantify the experience and training needed to perform the functions of this critical position. The Communications Coordinator is responsible for all communication functions of the SPMC regarding interface with the Massachusetts communities, providing direction and control to the NHY Offsite Response Organization Communications Staff, and for ensuring that all communications positions are staffed on a continuous basis. In addition, the Coordinator is responsible for trouble shooting and correcting communication problems. The training provided by the SPMC (See Plan, Table 6.3-1) is not adequate to compensate for this deficiency.

M. The SPMC states that no previous qualifications are required for the position of telephone operator. Plan, 2.1.1, p. 2.1-19. The Plan fails to quantify the experience and training needed to perform the functions of this position. Telephone Operators are responsible for processing incoming calls, directing incoming calls to the proper place, and maintaining a log of all incoming calls. Past experience as a telephone operator is required to adequately handle the

anticipated influx of calls during an emergency condition, as well as the complicated communication switchboard and system. The training provided by the SPMC (See Plan, Table 6.3-1) is not adequate to compensate for this deficiency.

N. The SPMC states that no previous qualifications are required for the position of Administrative Staff. Plan, 2.1.1, p. 2.1-23. The Plan fails to quantify the experience and training needed to perform the functions of this position. Administrative Support Staff are responsible for recordkeeping, typing, filing, and answering the phones. These functions are in direct support of personnel assigned to the NHY Offsite Response Emergency Operations Center. The training provided by the SPMC (See Plan, Table 6.3-1) is not adequate to compensate for this deficiency.

O. The SPMC states that "[p]rerequisite experience as a Supervisor" is the qualification requirement of the Special Population Coordinator. Plan, 2.1.1, p. 2.1-25. The Plan fails to quantify the experience and training needed to perform the functions of this position. The Special Population Coordinator is responsible for notification, assistance, and coordination of protective action recommendations for health care related special facilities and special population groups. As a minimum this person, along with Special Population Liaisons, need to have emergency management training, care of special population training, and emergency medical training. The training provided by the SPMC (See Plan, Table 6.3-1) is not adequate to compensate for this deficiency.

P. The NHY Plan identifies the qualifications for Bus Drivers as "prerequisite experience as a Bus Driver and a requisite license." Plan, 2.1.1, p. 2.1-30. The Plan fails to quantify the experience and training needed for these contract positions. Bus drivers are responsible for providing evacuation services to the general public and special populations by driving pre-designated routes and reporting to special facilities/reception centers. At a minimum these personnel need training in the transport of special populations, training in designated routes, and training in the rules and regulations of the state and towns they will be serving. The training provided by the SPMC (See Plan, Table 6.3-1) is not adequate to compensate for this deficiency.

Q. The SPMC states that no prerequisite experience is required for the position of Traffic Guide. Traffic Guides will be dispatched to key intersections to set up traffic cones and barricades and direct traffic in a manner that produces the most efficient evacuation possible. They may be required to direct extremely congested traffic under adverse weather conditions and deal with thousands of disorderly, frustrated, and frightened drivers, many of whom may have been in traffic queues for six or more hours seeking to distance themselves from Seabrook Station. Many of the drivers will recognize that these Traffic Guides are not State/local police, but agents of the owners of Seabrook. It is inconceivable that Traffic Guides would not be required to have some substantial prior

experience directing congested traffic. The training provided by the SPMC (see Plan, Table 6.3-1) is not adequate to compensate for this deficiency.



F. TRAINING

CONTENTION 80: The SPMC provides inadequate training to members of ORO, and the State and local governments employees and other organizations who may have to respond in an ad hoc fashion to an emergency are not receiving any training at all on SPMC procedures. The SPMC therefore violates 10 CFR 50.47(a)(1), 50.47(b)(15), and NUREG 0654, Rev. 1, Supp. 1, II.O.

BASIS: A review of the ORO training modules and information received from those who have received ORO training indicate that the training is entirely too general in nature, is much too brief, is not well done, and does not qualify ORO staffers to perform their jobs under the difficult and confusing circumstances that will prevail in the event of a serious radiological emergency at Seabrook Station. State and local officials, and other organizations, who may have to respond to an emergency at Seabrook have not reviewed the SPMC, do not have copies of it, and have no specific knowledge of its plans and procedures. They have received no training on the SPMC and will receive none in the future.

G. ACCIDENT DETECTION, ASSESSMENT AND PREDICTION

CONTENTION 81: Provisions in the SPMC for radiological monitoring are inadequate. As a result, the SPMC fails to meet the planning standards set forth at 50.47(b)(9); NUREG 0654 II, I and Appendix E, IV, E, 2.

A. The SPMC does not indicate that any planning for the locations of effective radiological monitoring in light of the specific local conditions that exist in the Massachusetts EPZ has been done. Maps referenced at Plan 3.3-4 are not adequately explained.

B. No criteria have been established for the decision to implement radiological monitoring and no information indicating the time-frame in which such monitoring could or should be implemented is established. See Pro-2.2, page 3, ("actual measurements as time permits").

C. Federal radiological monitoring program will not be available to ORO because the FRERP and the relevant Federal agencies will not respond to a request to enter a state when the State and local governments have not requested that aid. The circumstances under which "outside assistance" is to be sought are left unspecified in the SPMC and the actual integration and deployment of such outside assistance is left to ad hoc decision.

D. The ORO personnel to be used for radiological monitoring and dose assessment are inexperienced in the field of radiation and inadequately trained. The Dose Assessment

Technician ("DAT") is not sufficiently experienced in computer-based dose projections. The prerequisite experience required for the DAT is simply that of "worker in radiation protection", however, the actions expected of this individual involve extremely complicated manual and computer based calculations. See Pro-2.2, Attachment 1, Attachment 2. There is no indication that the training developed for this position could "qualify" an inexperienced computer user for this position. Moreover, the SPMC does not indicate what level of proficiency is required before one is so qualified. Similarly the Accident Assessment Coordinator who directs dose assessment and field radiological monitoring has neither sufficient experience in the field nor adequate training. Plan 2.1-6, -7.

E. The SPMC ignores the impact of mobilizing and evacuating traffic on the timely availability of field team members at the dispatch location as well as the further delay in arriving at a monitoring location. The SPMC does not rely on on-shift personnel for this function. For these reasons, there is no possibility of timely radiological monitoring in the Massachusetts portion of the Seabrook EPZ.

CONTENTION 82: The SPMC fails to provide reasonable assurance that adequate methods, systems and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency are in use or could be used and, therefore, does not comply with 10 CFR §§

50.47(b)(2), (4), (8), (9) and (10), and 10 CFR Part 50, Appendix E, IV, B.

A. Emergency action levels set forth in the SPMC do not appear to include any references to offsite radiological monitoring data as required by 10 CFR Part 50, Appendix E, IV, C.

B. Dose calculation methodologies in the SPMC reference field sample data at Pro-2.2 at 5 but no provision is made for the timely acquisition and communication of this data to the necessary personnel.

C. The number of monitoring teams (two 2-person field teams) and the training and experience of the personnel is inadequate to adequately monitor radiation levels in the Massachusetts portions of the EPZ. Further, the procedures developed to direct and control these field monitoring teams are inadequate.

1. No direct communication between EOC dose assessment personnel and these field teams exist either at the time they are dispatched or later when they are in the field. Plan 2.1-7. But cf. Plan 3.3-7 with Pro-2.3 at 5.2.3.

2. No criteria exist in the SPMC on the basis of which the Accident Assessment Coordinator or the Field Team Dispatcher could decide to assign specific monitoring locations to the Field Team(s).

3. The absence of any back-up personnel to support the 2 field teams could result in no available teams in

the time period during which actual dose monitoring is critical to effective and accurate PARs.

4. Field Monitors are to report to the Staging Area in Haverhill upon notification Pro-2.5 at 6. The locations of work and residence for these personnel are such that timely mobilization is not possible. No back-up personnel are provided for these field teams. Appendix H at H-45.

E. The SPMC provides no assurance that adequate coordination of dose assessment activities taking place at the EOC and the EOF based on a variety of different field monitoring teams will exist. Plan 3.3-2.

#### H. HUMAN BEHAVIOR

CONTENTION 83: The SPMC fails to recognize three distinct and unique aspects of human behavior during a radiological emergency at Seabrook which will pervade the response to such an emergency by ORO personnel and the public. As a result, the SPMC does not meet the planning standards set forth at 50.47(b) and does not support a predictive finding that adequate protective measures can and will be taken pursuant to 50.47(a)(1).

##### BASIS A:

1. The ORO personnel who staff the utility emergency response organization have committed themselves to function in an emergency capacity even though many, if not most, have no emergency worker experience. This commitment even if genuine and sincere, is based on these utility workers own belief-structure regarding the likelihood of a radiological accident at Seabrook and on these individuals' perceived and actual self-interest in standing behind Seabrook now so that it might be licensed. Significantly, these amateur emergency workers have not committed themselves to report to duty and maintain their stations as would experienced emergency workers based on their knowledge of and experience with emergencies. In light of these facts, in the event of an actual emergency at Seabrook, the very bases for the amateur emergency workers commitment would fall away: an accident severe enough to

require mobilization of ORO has occurred and the economic well-being of the utility has already suffered no matter what the actual consequences. Compared to the real emergency worker whose commitment is based on the possibility and actuality of an emergency, the commitment of the amateur emergency worker, even if genuine, is based on the impossibility of such an emergency. As a result, there can be no assurance that the ORO emergency workers will respond.

2. ORO emergency workers will be liable for damages resulting from their actions and the SPMC does not discuss at all what, if any, provisions or agreements for indemnification exist. Moreover, although state emergency workers are indemnified by the Commonwealth pursuant to statute, the SPMC is silent on the relationship, if any, between authorization of police powers and indemnification for ORO workers.

3. ORO workers before responding to an emergency, like all emergency workers, will check on the safety of their own families. No attempt has been made in the SPMC to staff the ORO with single individuals or to provide married emergency workers with information about their families. As a result, role conflict and abandonment will occur.

B. The SPMC totally ignores the social, political and ideological effects of the lengthy struggle against Seabrook on the populations in the Massachusetts EPZ. Those populations form an anticipatory disaster subculture that has its own



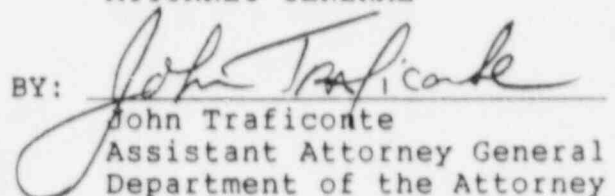
indigenous understanding of the nature of the radiation risk presented by Seabrook. As a result, even before an emergency has actually occurred, social forces influencing that subculture make it highly unlikely that any form of "therapeutic community" would or could emerge. Instead, an emergency would result in increased social conflict making significantly more difficult any effective emergency response.

C. The SPMC totally ignores the behavioral aspects of the situation that will result if a severe fast-paced accident occurs during a crowded summer beach day. As the Applicant has acknowledged, the protective measures available to the beach population will not be effective in preventing severe and in some cases immediate health effects. Unlike other emergency situations characterized by rational social behavior, a situation in which large numbers of individuals receiving doses of radiation are not able to shelter or evacuate will result in severe, aberrant, and irrational behavior. The SPMC ignores this likely phenomenon and as a result provides no assurance that the emergency situation will be adequately handled.

Respectfully submitted,

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

DOCKETED  
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OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

In the Matter of )  
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)

PUBLIC SERVICE COMPANY OF NEW )  
HAMPSHIRE, ET AL. )

(Seabrook Station, Units 1 and 2) )  
)  
)

Docket No.(s) 50-443/444-OL

CERTIFICATE OF SERVICE

I, John Traficonte, hereby certify that on April 13, 1988, I made service of the within Attorney General James M. Shannon's Contentions Submitted in Response to the Seabrook Plan for the Massachusetts Communities, postage prepaid, by first class mail, or as indicated by an asterisk, by Federal Express mail, to:

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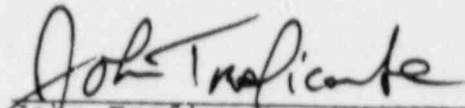
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