

CT-1951A

D.E. Drum

COMMENTS ON THE SEABROOK EMERGENCY PLANS

DEC 1 1985

GENERAL

1. Why does the Subcommittee not hear from critical and responsible state persons, such as those in charge of Civil Defense and of the Department of Public Health? It would seem these individuals and their resources are important parties to these proceedings, equivalent to the applicant utility, FEMA and the NRC.

2. Do we deliberately rule out the important roles in widespread emergencies of the active and reserve armed forces? It seems to me they regularly assist in other forms of civilian accidents involving large areas or numbers of people, hence it would seem likely they would be put to use for triage, transportation, communication and traffic control.

3. The general population may need further education regarding the possibility of evacuation prior to or in the absence of a release. Otherwise, I fear it may be quite difficult for them to distinguish between a precautionary measure and the absolute "run for your life" kind of scenario.

4. Why not interweave the emergency planning with plans already in place for other emergencies and with the requirements of SARA III legislation? The area around Seabrook has unexcelled capabilities for transporting people, medical triage and treatment, temporary sheltering, and communication. Why not use these resources?

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5. In regard to weakest links in the chain, I would express more concern for communications. Although this is not explicitly my field of expertise, experience with many drills, including the FEMA-type exercises with power plants, is that accurate communications are rarely accomplished.

6. Is there any possibility that Massachusetts might in some way interfere deliberately with implementation of the plans of the Seabrook ORO? The documents presented at the meeting and the last minute materials arriving from the Massachusetts Attorney General implied that Massachusetts would not cooperate with the Seabrook plan because it felt the plan was inadequate.

7. Is there any provision for negotiating, if at all, strong differences between the Seabrook experts and the Governor's staff over appropriate protective actions? For example, suppose the Governor considers that even 1 mrem is an excessive projected dose?; or, should pregnant women (for political or "psychological" purposes be evacuated at lower levels than the general population?; what of immobile persons such as nursing home residents? I believe graded actions are good, but as stated above, the population must be informed repeatedly of the plan. I think they would accept it, because they are used to similar types of procedures in other accident situations.

8. In Massachusetts, why is there required contact with both the Department of Public Health and the Civil Defense organization? It would seem that as soon as more than one organization is assigned a lead role that coordination might be less than optimal. Also, having Massachusetts Civil Defense as the lead organization

would be consistent with the integrated Massachusetts emergency plan already on record and distributed.

9. In regard to what we are planning for, perhaps expectations must be clearer in the minds of others. For example, there will not be injuries related to radiation off-site in any case; this has important implications for the kinds of medical preparedness needed off-site and for efforts to ensure that uninjured persons do not flood hospital emergency rooms.

10. I am impressed that the role of FEMA - its findings, credibility and follow-up are critical to having the off-site emergency plans move smoothly.

11. I recommend that some effort be put into the classifying and working out the generic problem with many details raised by the Massachusetts Attorney General; for the most part many of those details will need to be resolved on the route to maintaining full compliance with the SARA III regulations, to which the Governor of Massachusetts is committed.

12. It is unfortunate that all of the states involved do not have better governmental leadership. It seems to me that high morale and enthusiasm among those planning for emergencies from a wide spectrum of sources is essential. Emergency planning is important to us all, and citizens should be proud to be taking part. Witness, for example, the emergency plans in other countries, such as Switzerland. I am curious that nowhere in the proceedings was there any mention of the fairly explicit

intimidation of emergency planning components by the office of the Massachusetts Attorney General. Is the Advisory Committee aware of this?

13. I believe that all accredited hospitals, ambulance services, and fire departments would have to be generally trained in some of the issues, including managing contaminated patients, disease. Thus, the emergency medical plans really add very little to accreditation requirements, and must aim primarily to enhance existing capabilities.

14. Is there any provision for reversal of emergency proceedings if conditions are re-evaluated and found to be markedly less severe than postulated? Is this taken account of in the restoration proceedings?

15. I wonder if any detailed cost evaluation of the overall emergency plan has been made based on Seabrook's specific probability risk assessments and the actual needs for various kinds of off-site action. Are the majority of actions primarily political in nature?

16. Although substantial concern for Seabrook emergency planning under the extremes of favorable weather and a loaded beach have been made, what about the other extreme, i.e., extremely bad weather in winter, making any form of transportation difficult or hazardous?

17. In the absence of cooperation by the Commonwealth of Massachusetts, I'm concerned that its Governor might call for evacuation of persons under circumstances where the State of New Hampshire might not; is there some planning in advance that has

been done by the applicant and by New Hampshire in regard to dealing with protective actions by massachusetts which are out of line with those recommended elsewhere. In general, Massachusetts has tried to be "more conservative" than required by federal guidelines in many other areas.

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STATE OF NEW HAMPSHIRE RADIOLOGICAL EMERGENCY PLAN (FEMA  
EVALUATION)

I was not clear after the recent meeting whether the occurrence of non-cooperating New Hampshire communities within the EPZ will require initiation of utility-based emergency plans analogous to those developed for the Commonwealth of Massachusetts. Perhaps this issue has been resolved in other documents that I have not reviewed.

Page 30, E.7. Because I have not listened explicitly to the messages proposed to be broadcast to the public, I can only express concern that they be very carefully and simply worded. In particular, the uses of ad hoc respiratory protection and radioprotective drugs are sufficiently controversial, as I mentioned elsewhere, that I am not sure they should be in the broadcast messages.

Page 54-55, I.8. Measurement of airborne radioiodines at E-07 microcuries per cc amidst a plume plus ground deposition seems to me an ambitious accomplishment. I presume the methodological details were reviewed thoroughly by FEMA.

Page 64-65, J.9. As suggested by others at the committee meeting, I believe the matter of evacuation of transient beach users has been greatly exaggerated as a substantive issue. It seems to me that FEMA treated the matter fairly and accurately.

Page 72, J.10.e. I've expressed reservations about "radioprotective drugs" elsewhere.

Page 90-91, K.3.a. Maintenance and proper zeroing of all these pen dosimeters would appear to me a formidable job and one that requires sustained year-round attention; are the resources available for this?

Page 93. The use of a 20 R exposure level to require exit of emergency workers is appropriate.

Page 95, K.5.b. Some of these restrictions on contamination seem potentially unduly cumbersome. For example, if an emergency person finds his clothing or body contaminated 1200 counts per minute above background, certainly some local measures might be taken prior to referring him to a decontamination facility; many minor contaminations exceeding 100 counts per minute would hardly appear to warrant removing scarce and critical trained personnel from performing their regular duties.

Page 97. The local medical facilities in the area are fully adequate for the responsibilities assigned. The MS-1 hospitals will require continuing education programs.

Page 117. Appropriate and sustained training of the large number of emergency response personnel proposed by the plan is a formidable commitment.

As a general comment, the commitment to annual updates of organizations, agreements, drills and training is a major one, albeit necessary. I hope the applicant and support communities recognized the magnitude of this assignment.

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SEABROOK PLAN FOR MASSACHUSETTS COMMUNITIES (SPMC):

FEMA EVALUATION OF DECEMBER, 1988

In the absence of a detailed review of all the tables and supporting materials, I presume the abstract here reflects accurately the very complete scrutiny and assessment made by FEMA.

Page 8, A.1.d. This statement implies obtaining the approval of the Governor of Massachusetts; how is this done, if he is not cooperating?

Page 16, C.3. This statement indicates that one mobile laboratory van will be available to process 96 samples per day; is one van of this throughput capacity generally considered adequate for plants of the size and circumstances of Seabrook? The mobile facilities of the Commonwealth of Massachusetts and New Hampshire are not specified, if they exist. Do these also include those available from the armed forces and Department of Energy?

Page 18, C.5. The personnel chosen to advise Massachusetts and local officials on a wide variety of topics must be exceptionally well informed and articulate people; this assignment seems to me to be quite a responsible one.

Page 22, E. Notification. Are there advisories for "checking" notification; I'm concerned that the first response of those receiving the message may be disbelief or skepticism that a real accident has occurred. They might be likely to call their local police or radio station or hospital if they are not given in



advance some fail-safe check mechanism.

Page 27, E.5. If evacuation is indicated, I have reservations about the efficacy of "ad hoc respiratory protection and thyroid blocking", as applied to the general public. I would be willing to review these recommendations and the source of their authority with the applicant, if need be.

Page 62, J.10.e&f. I have indicated previously my concern that radioprotective drugs are not appropriate for administration to the general population off-site; I realize this is a state-by-state decision.

Page 74, J.12. At 2,000 counts per minute individuals are directed to enter a radiological screening program. Because 2,000 counts per minute even in the form of contamination represents an extremely low immediate biological hazard, I am curious how these persons are triaged. Certainly some further evaluation and/or decontamination efforts should be made before embarking on time consuming bioassays or whole body counting.

Page 75, K. I have some concerns about the reliability of direct reading dosimeters when distributed to large numbers of people and subject to many circumstances other than radiation, mechanical trauma for example, that may cause the cross hair to deflect slightly upward or downward. Is there experience to demonstrate that pen dosimeters being used will not contribute significant difficulties ("false" readings) of this sort? The remainder of the evaluation of contamination control seems very thorough and well done.

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STATUS OF CORRECTIVE ACTIONS FOR THE 1988 FEMA GRADED EXERCISE

Comment: The three outstanding areas needing refinement that appear repetitively throughout this document are: (1) Communications; (2) dosimetry/monitoring; (3) Maps and directions.

Maine. It seems that FEMA is satisfied with the responses. I would think the State of Maine must be prepared to survey many individuals who want simply to be "checked", even if the plume may be blowing toward other regions. Such people may prove to be a large burden even outside the EPZ if their inquiries are not planned for.

New Hampshire.

Page 4. I am not sure about the wisdom of depending solely on FAX devices for communications; is there some form of radio backup?

Page 8. Does monitoring training include the issue of dealing with contaminated persons amidst high "background" from area plume or ground deposition sources?

Page 9, Objective 23. I hope MS-1 hospitals are severely limited only to injured contaminated patients and transfers.

Objective 24. I am not sure emergency medical and nursing staff need to know "biological effects of radiation" or the meaning of CPM or millirem/hour. Many if not most radiologists and health physicists don't really know how to explain these terms.

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Page 17, Objective 16. I personally don't recommend KI be given to offsite populations in an emergency; if it is done nevertheless, discussion of rare side effects is not appropriate in an emergency situation.

Page 21, objective 24. My comment is identical to that above for page 9.

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VEHICULAR ALERT AND NOTIFICATIONS SYSTEM (VANS)

This particular area of emergency preparedness is outside my sphere of expertise, hence I comment as a layman. First of all, it is most unfortunate that local lack of cooperation requires fundamental modification of the kind of alert system that might well be needed by the community for many other kinds of accidents or natural hazards threatening the general population. However, both the text and the presentation on the VANS system were most interesting and seemed to document the acceptability of the system. The various supporting documents and those including controversy raise a number of new issues in area-wide population warning which, while meriting generic consideration on a nation-wide basis, need not delay implementation of the system as proposed by the applicant.

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EVACUATION TIME ESTIMATES (ETE)

This is another area outside my experience and training. It seems that these are reasonably done, and that the range of 7 to 8 hours for full evacuation of the entire 10 mile EPZ is reasonable. Such a long time I presume reflects the fact that the last 5 or 10 percent of those evacuated take the greatest commitment of time. The experience of having visited the beach and the area repeatedly during hot weather together with application of common sense and notation of times for the transients to return home after daily or weekend outings reassures me that the area close to Seabrook, perhaps within two miles and including the beaches, would be evacuated extremely rapidly - in far less than 8 hours.

I find it difficult to believe that the issue of returning commuters deliberately entering an evacuation zone is legitimate or probable. It is true that a small fraction of the population drives toward hurricane areas, but I think people are far less casual about radiation and radioactivity than they are about natural hazards.

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COMMENTS ON THE LETTER FROM THE ESSEX BOARD OF SELECTMEN

The comments by the Essex Board of Selectmen would appear to be generic ones that both in their content and resolution apply to all nuclear power plants in our country.

Items 1, 3, 5, and 8 dealing with operating effluents would, I believe, be fully covered under operating regulations of the NRC and EPA. Experience from the many other operating plants should reassure the selectmen.

Items 2, 6, and 7 regarding releases during emergencies are also generic, although of concern and a major part of the reason for emergency planning. In my opinion the likelihood of even an accidental release causing serious hazards as far away as Essex is remote. Of course, no probability of an accident is as low as zero, and Essex will face many other disasters (such as a repeat of the 1938 and 1954 hurricanes) in the coming decades.

Items 4 and 9 appear to be statements, hence no reply is appropriate.

Whether effluents on a routine basis and in emergency situations represent violations of constitutional rights is a legal question outside my area of expertise. I would hope there is legal precedent to help the selectmen understand how this issue has been resolved and how they may best communicate with their constituents.

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