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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
METROPOLITAN EDISON COMPANY, )  
(Three Mile Island Nuclear )  
Station, Unit No. 1) )

Docket No. 50-289  
(Restart)



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COMMONWEALTH OF PENNSYLVANIA'S REPLY PROPOSED  
FINDINGS OF FACT AND CONCLUSIONS OF LAW  
ON EMERGENCY PLANNING ISSUES

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I. PRELIMINARY MATTER IN THE NATURE OF AN AMENDMENT

Upon second review of the Proposed Findings of Fact and Conclusions of Law on Emergency Planning Issues filed by the Commonwealth on or about August 14, 1981, counsel for the Commonwealth has discovered two (2) instances where incomplete reference was made to the emergency planning rule. Thus, the Commonwealth seeks to amend its Proposed Findings of Fact and Conclusions of Law on Emergency Planning Issues as follows:

1. Page 32, ¶53, line 3 add "\$50.54(s)(2)" after "\$50.47(a)(1)".
2. Page 41, ¶61, line 7 add "\$50.54(s)(2)" after "\$50.47(a)(1)".

II. REPLY PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

A. Rebuttable Presumption Standard

1. The Licensee asks the Board to establish a standard for the rebuttable presumption standard in 10 C.F.R. §50.47(a)(2) as following: "the FEMA finding is presumptively valid and we will require substantial, convincing and probative evidence to rebut such a finding." Licensee's

Proposed Emergency Planning Finding 32. Licensee provides no citation to support this standard, and it must be rejected by the Board. The Commonwealth properly directed us to Federal Rule of Evidence 301, which sets the appropriate standard for this proceeding. Commonwealth's Proposed Emergency Planning Finding 11.

B. Emergency Operations Facility Staffing\*

2. Licensee asks the Board to find that NUREG-0654 and NUREG-0696, Rev. 1 do not require the Emergency Support Director to report to the EOF within one hour of declaration of a site emergency. Licensee's Proposed Emergency Planning Finding 46. Yet in a footnote, Licensee acknowledges that NUREG-0654 "recommends" such a practice. Id. at n. 13. The Board finds that the two NUREGs, when read together with the emergency planning rule, require the full staffing and operation of the EOF within about one hour. See Commonwealth's Proposed Emergency Planning Findings 22-24. The fact that the Staff guidance documents do not contain detailed staffing criteria beyond the requirement for a director, as argued by Licensee, does not eliminate the Staff's requirement for "full functional operation" with a senior management director of the EOF. Staff Ex. 7, Table B-1; Staff Ex. 8, at 19. As noted earlier, regulatory guidance is entitled to presumptive weight. [Commonwealth's Proposed Emergency Planning Findings 15, 25] Licensee has the burden to demonstrate a functional alternative to the Staff's recommendations. The Board finds that Licensee has not demonstrated an alternative regarding the functions performed by the Emergency Support Director. Licensee argues that the absence of the Director is compensated for by Licensee's

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\* Response to Licensee's Proposed Emergency Planning Findings 44-56; covered in Commonwealth's Proposed Emergency Planning Findings 19-50.

large offsite response organization. Licensee's Proposed Emergency Planning Finding 46. The Board does not comprehend this argument. If anything, the increased size and complexity of Licensee's offsite response organization argue in favor of the need for a single coordinator of the offsite response network.

3. Licensee later argues that stationing of an Emergency Support Director within one hour is not required by NRC regulation. Licensee Proposed Emergency Planning Finding 51 n. 16. The Board, however, interprets Appendix E to 10 C.F.R. Part 50 as imposing such a requirement. Section IV.E.8 of Appendix E requires "a licensee near-site emergency operations facility from which effective direction can be given and effective control can be exercised during an emergency." (emphasis added). See Commonwealth's Proposed Emergency Planning Finding 25. The Board does not understand how direction can be given without the presence of a director.

4. Licensee characterizes the concerns raised by the Commonwealth of Pennsylvania regarding EOF staffing as "wholly speculative and without any factual basis." Licensee's Proposed Emergency Planning Finding 54. This allegation is unsupported by the record. The Commonwealth's testimony was based on direct observation and participation in drills and exercises conducted at TMI-1. See Commonwealth's Proposed Emergency Planning Finding 34. The opinions of the Commonwealth's expert, Mr. Dornsife, were based on his observations of all of the technical and radiological information available at the EOF, and of the functioning of the EOF during the June 2, 1981 exercise. See id., Findings 37, 39, 41. Moreover, Mr. Dornsife's views were confirmed by the Staff. See id., Findings 34, 36. On the other hand, it is the Licensee's views as to

the functioning of the EOF without a director that are "wholly speculative and without any factual basis." Licensee's proposal has not been tested in any exercise or drill, particularly with offsite organizations, to establish the workability of the onsite/offsite interface. See id., Findings 39, 40, 41. In short, not a scintilla of evidence has been produced to support Licensee's "functional equivalence" argument with respect to Licensee's interface with the Commonwealth and other offsite response organizations.

5. Licensee also mischaracterizes the Commonwealth's testimony regarding BRP's accident response. Licensee's Proposed Emergency Planning Finding 55. Mr. Dornsife testified that it was the Commonwealth's intention to dispatch a nuclear engineer to the EOF within one hour after declaration of a site emergency. Tr. 23, 017. Mr. Dornsife simply noted that BRP would not formally consider a modification to its emergency plan until Licensee makes its commitment to staff the EOF fully within one hour. Id. at 23, 017-19. Moreover, Mr. Dornsife explained that resource limitations within BRP may preclude an absolute commitment to arrive within one hour. Id. at 23, 019. Rather, the Commonwealth's approach is based on the desire to provide the best possible accident response given available personnel resources. Id. at 23, 083-84. This approach is perfectly reasonable.\*

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\* Similarly, the Board does not understand Licensee's reference to other Pennsylvania reactors. Licensee's Proposed Emergency Planning Finding 55 n. 19. Obviously, the Commonwealth is bound to provide the best possible accident response at each site in the state given available resources and given site location. The fact that a different approach may be required for Beaver Valley should not prevent optimum protection of public health and safety at TMI-1. In any case, Mr. Dornsife indicated the Commonwealth's intention eventually to provide 24-hour coverage for each site in the state. Tr. 23, 083 (Dornsife).

### C. Public Education

6. \* In their Proposed Findings of Fact and Conclusions of Law, Intervenor's incorrectly cite to the record to reflect that the Commonwealth's pamphlet containing general radiation information (Commonwealth Ex. 3) is being revised prior to redistribution. Combined Intervenor's Proposed Findings, page 75, ¶173, lines 11 and 12; \*\* page 77, ¶175, lines 13 and 14. \*\*\* The transcript reference used by Intervenor's to draw this conclusion is a cross-examination question posed by counsel for the Commonwealth, in which the fact that the five county brochures (e.g., Commonwealth's Ex. 4, 5 and 7) were being revised was an underlying assumption. As discussed in the Commonwealth's Proposed Findings of Fact and Conclusions of Law, the five county brochures will be revised. Commonwealth's Proposed Findings, page 59, ¶94. The record reflects that at the time of hearing, PEMA had no present intention of revising the PEMA pamphlet (Commonwealth Ex. 3). Tr. 18, 067 (Corney).

7. The record also reflects that Licensee has committed to pay for the printing and distribution of both the PEMA pamphlet and the updated five county brochures. Tr. 22, 878 (Chesnut). Given this opportunity, PEMA has undertaken certain minor revisions to the PEMA pamphlet. In its Reply Proposed Findings of Fact, the Commonwealth has indicated that while revisions and updated information will be included prior to printing and distribution, the exact content of such additional or changed information has not been fully determined.

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\* These sections are necessary to clarify certain incorrect references to the record made in combined Intervenor's Proposed Findings of Fact and Conclusions of Law.

\*\* " ... the Commonwealth's information pamphlet (Ex. 3) which is being revised prior to redistribution. (Tr. 22, 916, Straube)."

\*\*\* "Chesnut didn't even know there would be a new pamphlet from PEMA ..."

8. \* The Board has concluded that the public education program must be implemented prior to restart, at least to the extent of distribution of the PEMA pamphlet and the five county brochures. Commonwealth's Proposed Findings, page 59, ¶93; page 60, ¶95. Licensee is in agreement with this requirement and has committed to effectuate such distribution prior to restart. Licensee's Proposed Findings, page 126, ¶160; page 128, ¶163. The Board is concerned, however, that Licensee's projected target date for distribution by September 1, 1981, may result in the distribution of incomplete information. Tr. 22, 878-79 (Chesnut). We feel that the effectiveness of this portion of the public education program is directly dependent upon the accuracy and proximity of the information being distributed. In light of the anticipated changes and additions to the PEMA and county brochures,\*\* the Board finds it imperative that Licensee does not make distribution of this public education material until all changes and revisions have been made.

#### D. Transients

9. \*\*\* Licensee seeks to have this Board find that the mere existence of a plan of distribution for public education materials to transient locations, and the statement by one county coordinator that he is working on publicizing emergency responsibilities regarding transients "provides adequate assurance that transients in the York County area at

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\* Reply to Licensee's Proposed Findings, Section II.D., ¶¶156-163.

\*\* See, Commonwealth's Proposed Findings, pages 58-59, ¶92, and Licensee's Proposed Findings, page 128, ¶167, footnote 40, for some description of anticipated changes and additions.

\*\*\* Reply to Licensee's Proposed Findings, Section II.D., ¶¶170-171.



risk will be provided with sufficient emergency preparedness information in the event of an emergency at TMI." Licensee's Proposed Findings, page 135, ¶171. Licensee would also have us rely on future monitoring by FEMA as assurance that actual distribution will be accomplished. Licensee's Proposed Findings, page 135, ¶171. The Board cannot draw full assurances from this, since FEMA has no regulatory or enforcement powers of its own. E.g., Tr. 22, 477 (Bath); Tr. 22, 402 (Bath).

10. Furthermore, the issue of education and notification of transients is one which extends far beyond York County alone. Transients are a sector of the public for whom planning according to the 16 planning standards of the emergency planning rule must be accomplished. See, Commonwealth's Proposed Findings, page 61, ¶97; 10 C.F.R. §§50.47(b)(7), (b)(10). As such, this Board must determine whether the relevant planning standards have been met, and whether the plan can be implemented as written. Board's March 23 Order; 10 C.F.R. §§50.47(a)(1), 50.54(s)(2); see also, Licensee's Proposed Findings, page 20, ¶26. As discussed more fully previously,\* the Board finds that actual distribution to all transient location of updated and current information is required for compliance with the emergency planning rule. The Board has also found that owners or key individuals of transient locations and businesses must be made aware of their responsibilities during an emergency before there can be any reasonable assurance that transients will, in fact, be notified "at the time of need". Bath, ff. Tr. 22, 350, at 2.

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\* See, Commonwealth's Proposed Findings, Section VII, for complete discussion on notification to transients.



### E. Implementation of Protective Actions

11.\* The Board is surprised by Licensee's statements which attempt to minimize the importance of complete planning for evacuations, by referring to Levenson's theories regarding concentrations of I-131 escaping a nuclear facility during an accident.\*\* Licensee's Proposed Findings, pages 241-42, ¶¶314-315. The Board does not doubt that in certain situations, "... sheltering for a limited period of time probably will be an adequate protective measure ...". Licensee's Proposed Findings, page 241, ¶315; Tr. 18, 540 (Reilly). The Commission's "defense-in-depth" philosophy does not permit us, however, to ignore an important means of protecting the public health and safety on the basis of a theory that is as yet unproven. See, Levenson, ff. Tr. 19, 525. In fact, the cross-examination of Licensee's witness Levenson indicated that his "hypotheses" are controversial and highly disputed. E.g., Tr. 19, 533 (Levenson); see also, Tr. 19, 531 (Levenson), referring to a report co-authored by the NRC (Office of Nuclear Regulatory Research and Office of Nuclear Reactor Regulation) which contradicts Levenson's hypotheses (draft NUREG-0772).

12. The Board notes further that the stated planning basis for emergency planning encompasses a range of possible accident scenarios, including "planning for the worst possible accident, regardless of its extremely low likelihood." NUREG-0654, Section I.D., p. 7. The likelihood (or lack thereof) of a particular accident scenario occurring cannot be

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\* Reply to Licensee's Proposed Findings, Section II.G, ¶¶314-315.

\*\* Licensee makes a similar argument in its section on potassium iodide distribution. Licensee's Proposed Findings, Section II.G.12, ¶¶416-418. The Board likewise cannot rely on Levenson's unproven and controversial theories in reaching its decision on Intervenor's contention regarding pre-distribution of KI to the general public.

used by this Board, or the Commission, as a justification for overlooking or minimizing certain portions of the emergency planning effort. The emergency planning rule requires that a "range of protective actions" be developed. 10 C.F.R. §50.47(b)(10). Evacuation of the entire plume exposure pathway EPZ is one of the three protective actions developed by the Commonwealth of Pennsylvania. Commonwealth Ex. 2. In addition, the Commonwealth's Bureau of Radiation Protection (BRP) has indicated that sheltering and evacuation are equally likely options to be recommended as a protective action. See, Tr. 18, 144-147 (Reilly). Absent any indication in the planning itself, the Board is not given the discretion to attach varying importance to each of the protective actions. Thus, we are required by the rule and by this Commission's Order and Notice of Hearing to inquire fully into the extent to which the planning for each element of a particular protective action (i.e., evacuation, sheltering and access control) is necessary, sufficient, and presently capable of being implemented.

#### F. School Plans

13.\* Licensee would have this Board reject all Intervenor contentions which allege deficiencies relating to school planning in York and Dauphin Counties, arguing that the existence of school evacuation "master plans" within those two county plans resolves any problems. E.g., Licensee's Proposed Findings, page 286, ¶357; page 290, ¶363, page 294, ¶370. Without at this point discussing the merits of individual contentions, the Board emphasizes that its review of emergency planning in this proceeding extends beyond the issues identified in specific

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\* Reply to Licensee's Proposed Findings, Section II.G.6, ¶¶355-361, and Section II.G.7, ¶¶366-370.

contentions. Thus, where school evacuation planning is concerned, this Board must determine whether the present state of planning and preparedness provides reasonable assurance that school evacuations can and will be accomplished in each county including York and Dauphin. Based on the record, we find that presently there is no such reasonable assurance. The development of coordinated planning to at least the school district level would, however, provide reasonable assurance that school evacuations could be successfully executed. Tr. 22, 480 (Bath).

14. As Licensee correctly points out, one FEMA witness did state that he felt that individual school plans as such were not a prerequisite to compliance with the emergency planning rule. Licensee Proposed Findings, page 286, ¶358; Tr. 22, 401 (Bath). Licensee's arguments, however, focus too closely on the necessity for individual school plans and ignore the Board's larger concern regarding reasonable assurance that the health and safety of school children will be protected. This same FEMA witness stated that the only assurance he had regarding coordinated implementation of the county "master plan" was the knowledge that the school districts would receive notification and instructions in the event of an emergency. Tr. 22, 396-97 (Bath). He had no assurance that the schools, at the other end of the process, could evacuate as directed. Tr. 22, 397 (Bath).<sup>\*</sup> Later, he again stated that school district plans were important "in order to demonstrate that there is an adequate capability of evacuating school children in accompaniment with county plans." Tr. 22, 436 (Bath). The Board considers this tantamount to saying there is no assurance that school children will be evacuated and reunited with their parents after evacuation.

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\* The Board notes that these comments were made after the witness had participated in the June 2 exercise. We thus infer that the exercise did not provide any additional assurances which would eliminate the problems associated with a lack of planning.

15. The Board has previously identified the various reasons it considers planning at the school district level to be necessary and sufficient to provide the requisite reasonable assurance. Commonwealth's Proposed Findings, Section IV. We just briefly point out that the assurances regarding school evacuations cited by Licensee are not the only relevant ones. The ability "to notify parents and bus drivers of unscheduled school closings" is not the only responsibility which the schools or school districts must fulfill in the event of an emergency. Licensee's Proposed Findings, page 286, ¶357; page 293, ¶368. Nor are discussions with school district superintendents in one county enough to establish an acceptance of responsibility on the part of all school districts within the plume exposure pathway EPZ and their ability to perform a coordinated evacuation. Licensee's Proposed Findings, page 286, ¶357. In a fixed nuclear facility incident, the speed and efficiency of an evacuation are especially important in terms of protecting public health and safety. The time-consuming task of coordination\* of school evacuations is exactly what FEMA has been concerned about. Tr. 22, 866-67 (Hardy); Tr. 22, 480 (Bath). During the June 2 exercise, Elizabethtown Borough also expressed concern over coordination of school evacuations. Staff Ex. 20, at 12.

16. Leaving many of the coordinating decisions up to ad hoc management at the time of an emergency would greatly impact on the time necessary to evacuate schools. See, Staff Ex. 21, at 19. Furthermore, children (and thus their parents) are totally dependent upon school authorities to protect their interests in the event of an emergency. Thus, the Board finds that planning for school evacuations

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\* "Coordination" includes an identification of adequate resources, and a recognition and acceptance of responsibility. Tr. 19, 215 (Adler).

must be completed to at least the lowest coordinating level of the school district before there can be reasonable assurance that the county "master plans" can and will be implemented, and that school children can and will be evacuated from the EPZ in a timely and coordinated manner.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that true and correct copies of the within Reply Proposed Findings of Fact and Conclusions of Law on Emergency Planning Issues were filed with the members of the Atomic Licensing and Safety Board on or about August 27, 1981, and were served on the attached Service List on or about September 8, 1981, by U.S. Mail, postage prepaid.

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