

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION



Before the Atomic Safety and Licensing Board

In the Matter of)	
)	
Philadelphia Electric Company)	Docket Nos. 50-352
)	50-353
(Limerick Generating Station,)	
Units 1 and 2))	

APPLICANT'S ANSWER TO LIMERICK ECOLOGY ACTION'S
CONTENTIONS ON ONSITE EMERGENCY PLANNING

Preliminary Statement

As a result of the Second Special Prehearing Conference held in the captioned proceeding on May 9-11, 1983, the Atomic Safety and Licensing Board ("Licensing Board" or "Board") ordered that contentions challenging the adequacy of the onsite Emergency Plan for Limerick ("Plan") be filed by June 21, 1983.^{1/} Contentions were filed by Limerick Ecology Action ("LEA" or "intervenor") on June 17, 1983.

In Applicant's view, the contentions submitted by LEA are deficient either in lacking requisite specificity and bases or in failing to allege noncompliance with the Commission's requirements for emergency planning. In addition,

^{1/} Limerick, "Memorandum and Order Confirming Schedules Established During Prehearing Conference" at 4 (May 16, 1983).

there are two general defects in the proposed contentions which Applicant will discuss preliminarily below.

Argument

- I. The Plan Is Not Deficient Under The Commission's Requirements Simply Because Implementing Details Are Not Finalized.

A significant deficiency which permeates a number of the proposed contentions is the misapprehension that each of the details of the Plan, such as the standard operating procedures to be utilized, must necessarily be in place before issuance of an operating license is considered or authorized by an Atomic Safety and Licensing Board. Rather, the regulations of the Nuclear Regulatory Commission ("NRC") require, as a general standard, "that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency" at a nuclear power plant.^{2/}

Under this governing standard, decisions of the Commission and its boards have approved issuance of an operating license in numerous instances where the specific details for implementing emergency plans had not yet been finally determined. Such details can be properly left to the NRC Staff for approval if the fundamental planning concepts are sufficiently developed at the time of a hearing to permit an

^{2/} 10 C.F.R. §50.47(a)(1).

assessment of their adequacy and capacity for implementation and if it can be demonstrated that these fundamental concepts meet all applicable criteria. While these decisions largely deal with details to be supplied in a facility's offsite plans, the same philosophy in finding "reasonable assurance" under Section 50.47(a)(1) that offsite plans are adequate would apply equally to an onsite plan.

In Diablo Canyon, for example, the Licensing Board authorized issuance of a full-power operating license despite the incompleteness of a number of standard operating procedures, stating:

In the case of the incomplete SOP's, we have the needed reasonable assurance since reasonable progress has been made to date in developing the first 21 SOP's and San Luis Obispo County continues in its lead responsibility for plan development. Model plans exist for the development of the others, and actual development is in progress and will be completed prior to full power operation. 3/

Similarly, in the Shoreham proceeding, the Licensing Board denied admission of a contention alleging that certain emergency implementing procedures have not yet been developed. The Board held that "we do not believe the non-existence of certain information which must be provided

3/ Pacific Gas and Electric Company (Diablo Canyon Nuclear Power Plant, Units 1 and 2), Docket 50-275-OL and 50-323-OL, "Initial Decision" (August 31, 1982) (slip op. at 14).

prior to fuel load and which will be provided as a result of start-up testing gives rise to a litigable contention. We also do not believe that the present absence of [Emergency Planning Implementing Procedures] to be based on this information gives rise to a litigable contention at this time."^{4/}

The division of responsibility between the Licensing Board and the NRC Staff was further explained by the Board in the Waterford proceeding. In that case, the Board determined that, while the evacuation warning system was well developed, certain aspects had not yet been finalized. Nonetheless, the Board found the plans satisfactory, noting the Commission's earlier observation in adopting the final rule for emergency planning that its findings were necessarily "predictive" to some degree:

Implementation of this plan is not yet complete; the sirens are not yet installed, and means for contacting particular persons or groups are still being formulated. This is not a defect in the plan. Emergency planning is a continuous process, and our findings are predictive. We are satisfied that, pursuant to 10 C.F.R. §50.47(a), the plans are sufficiently detailed and concrete to provide us with reasonable assurances that they can and will be implemented in the event of an emergency. In addition, the plans must be completed and fully exercised before the

^{4/} Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1), Docket No. 50-322-OL, "Supplemental Prehearing Conference Order" (September 7, 1982) (slip op. at 61) (emphasis in original).

NRC Staff can authorize full power operation. 10 C.F.R Part 50, App. E, §F.1.b.; 10 C.F.R §50.47. The implementation of details, such as the completion of a list of hearing impaired individuals and specification of means to contact them, can properly be overseen by the Staff. 5/

The Board summarized its views in stating that final details for the emergency plans "require only a purely objective determination and are appropriate for post-hearing ministerial resolution by the Staff."6/

This approach has been approved by the Appeal Board in several operating license proceedings. For example, in the Zimmer proceeding, the Appeal Board expressly stated:

We agree with the applicants that emergency response plans for a particular nuclear power plant need not be in final form at the time an operating license application is noticed for hearing. This conclusion follows from the Commission's expectation that the "plans shall be an expression of the overall concept of operation; they shall describe the essential elements of advance planning that have been considered and the provisions that have

5/ Louisiana Power and Light Company (Waterford Steam Electric Station, Unit 3), Docket No. 50-382-OL, "Partial Initial Decision" (November 3, 1982) (slip op. at 16-17) (emphasis added). The final rule on emergency planning and preparedness published at 47 Fed. Reg. 30232 (July 13, 1982) stated the Commission's view that its regulations call for a "predictive finding on emergency planning," adding that the "substantive emergency planning issues now being litigated in license hearings are largely focused on the 16 planning standards found in 10 C.F.R. §50.47(b)." Id. at 30233.

6/ Waterford, supra at 23.

been made to cope with emergency situations." 10 C.F.R Part 50, Appendix E, Section III (emphasis supplied). This is not to say, of course, that any plan, no matter how skeletal, will suffice at this stage. For Appendix E further stipulates that the plans submitted must include a description of their contents "to an extent sufficient to demonstrate that the plans provide reasonable assurance that adequate protective measures can and will be taken in the event of an emergency." Ibid (emphasis supplied). See also Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), ALAB-717, 17 NRC _____, fn. 57 (slip op. at 66). (March 4, 1983). 7/

The Appeal Board in the San Onofre proceeding, faced with the assertion that insufficient planning had been accomplished for the ingestion EPZ, rejected the argument that every "i" must be dotted and every "t" crossed before the NRC's approval could be made. It aptly declared: "In short, the applicants have largely accomplished all that can be accomplished in advance. . . . It is the State of California which is to complete its planning in this regard, and we urge it do so."^{8/} It further observed that the Commission itself "has stressed that this conclusion [under Section 50.47(a)(1)] may be a predictive one, rather than a

7/ The Cincinnati Gas & Electric Company (Wm. H. Zimmer Nuclear Power Station, Unit No. 1), ALAB-727, 17 NRC _____ (May 2, 1983) (slip op. at 15) (emphasis in original).

8/ Southern California Edison Company (San Onofre Nuclear Generating Station, Units 2 and 3), ALAB-717, 17 NRC _____ (March 4, 1983) (slip op. at 50-51).

reflection of the actual state of emergency preparedness at the time of the board's decision."^{9/}

In the Three Mile Island restart proceeding, the Appeal Board made specific recommendations for improving agricultural response plans, but nonetheless approved emergency planning findings by the Licensing Board. The Appeal Board stated:

. . . [T]he options available to farmers offer only a partial solution for the protection and care of livestock. The degree of protection available will depend on the circumstances and severity of the emergency. Despite a number of deficiencies in its plan, however, the Commonwealth has made a reasonable effort to insure protection for farmers that is consistent with the requirements of the Commission's emergency planning regulations. There is reasonable assurance of adequate protective measures for the health and safety of farmers. Guidance and options offering some protection of livestock are also available. Thus, we agree with the Licensing Board's conclusion that, although the safety of livestock cannot be guaranteed, the Commonwealth's emergency plan for farmers is adequate. ^{10/}

^{9/} Id. at 66 n.57, citing 47 Fed. Reg. at 30233.

^{10/} Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit No. 1), ALAB-697, 16 NRC ____ (October 22, 1982) (slip op. at 29). Elsewhere, the Appeal Board stated that, while it agreed with the Licensing Board's conclusion that provisions for the care of livestock "could be improved," it remained "fully convinced of the correctness of the Board's overall conclusion that the plan is adequate to protect the farmers." Id. at 19.

In a related decision, the Appeal Board held that other matters, such as the predistribution of permanent record dosimeters^{11/} and the time at which the licensee's Emergency Support Director must report when an emergency exists,^{12/} need not be finally determined prior to the Board's decision. The pragmatic value of this flexible approach was emphasized by the Appeal Board:

The development of the most effective emergency plan is an evolving and - importantly - cooperative process. On the basis of the current record, we find that the state of the licensee's onsite and offsite emergency preparedness provides reasonable assurance that adequate protective measures can and will be taken in the event of an emergency. As with previous exercises, we expect that tests under the licensee's plan will improve with practice but the first test should be carefully monitored to disclose any unexpected flaws in the licensee procedures. Obviously, this is a situation where a little more practical experience is worth far more than further adversary procedures. ^{13/}

The approach taken by the Appeal Board in the Three Mile Island proceeding reflects that which was taken by the Licensing Board below. In expressing its agreement with FEMA that additional planning on bus rerouting should be

^{11/} Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit 1), ALAB-698, 16 NRC ____ (October 22, 1982) (slip op. at 19).

^{12/} Id. at 35-36.

^{13/} Id. at 37 (emphasis added).

included in one of the county emergency plans, the Board stated:

In any event, based on the responsibilities assigned to the school districts, the lack of direction to school districts to provide for rerouting of school buses to pick up persons without transportation is not a plan deficiency. Rerouting of buses and the reallocation of transportation resources after they have performed their initial mission appears to be better left to the County Transportation Coordinator who will have a better knowledge of the overall transportation needs during the emergency.

The Board agrees that there is a need for additional planning in this area and that the primary responsibility for this planning and for the attendant coordination with the schools should probably rest with the County Transportation Coordinator. While we recognize that there is a deficiency at present we do not consider it sufficiently serious to tie its correction to restart of TMI-1.

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The Board agrees that municipalities should have written plans outlining in general how provision will be made for evacuation of chronic invalids or other handicapped persons who are unable to evacuate themselves. Such plans are desirable for general emergency preparation, not just for radiological emergencies. Beyond this level planning, the Board agrees that it is desirable to list names and addresses of such individuals with the appropriate local response agency but also notes that such lists require frequent updating. We note again our view that planning at this level of detail is best left to

local governmental units and has no place in NRC licensing proceedings. 14/

Accordingly, mere allegations that the final details of the Plan for Limerick have not been decided upon do not raise litigable issues.

II. Contentions Premised Upon An Expectation Of A Large Number Of Injured Contaminated Individuals Are Impermissible.

A second area in which the contentions are generally deficient relates to the availability of medical services and facilities for contaminated injured onsite employees. The proposed contentions fail to comport with the Commission's express policy determination in this area. In the San Onofre proceeding, the Commission directed certification of two issues concerning the scope of emergency planning for medical services for members of the general public required pursuant to 10 C.F.R. §50.47(b)(12). The Commission's resolution of the certified issue, however, provides equally clear guidance as to the requirements under Section 50.47(b)(12) for contaminated injured onsite employees.

Dealing first with the category of individuals who are traumatically injured and also contaminated with radiation, the Commission stated:

To meet the emergency planning regulation, it has been the general practice

14/ Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit No. 1), LBP-81-59, 14 NRC 1211, 1631, 1684-85 (1981).

for licensees or offsite authorities to make special arrangements for emergency treatment of contaminated injured onsite personnel and emergency workers. The issue here is whether there should be additional specific arrangements for the general public. While some immediate action may be required, the number of individuals both onsite and offsite who may become contaminated and injured is expected to be very few. The Commission believes it is prudent to identify local or regional medical service facilities considered capable of providing support for contaminated injured individuals. Additionally, emergency service organizations within the EPZ should be provided with information concerning the capability of medical facilities to handle individuals who are contaminated and injured. This information, in conjunction with the core services to deal with onsite personnel and emergency workers, should be sufficient to accommodate members of the general public and could be expanded as necessary on an ad hoc basis. 15/

Specifically, the Commission adopted the Appeal Board's estimate of "from one to perhaps 25 or so" individuals who would be both contaminated and injured in a radiological emergency. 16/

As to individuals who had been subjected to dangerous levels of radiation, the Commission noted that "the patients are unlikely to need emergency medical care," such that "any

15/ Southern California Edison Company (San Onofre Nuclear Generating Station, Units 2 & 3), CLI-83-10, 17 NRC (April 4, 1983) (slip op. at 11) (footnotes omitted) (emphasis added).

16/ Id. at 11 n.10.

treatment required could be arranged for on an ad hoc basis."^{17/} Accordingly, the Commission determined that no special prior arrangements for the treatment of excessive radiation must be undertaken by the licensee or local governments. In conclusion, the Commission stated:

The scope and timing of medical treatment required and the underlying assumptions and structure of 10 CFR §50.47 lead us to conclude that adequate medical services could be provided by using existing local or regional facilities including arrangements made specifically for onsite personnel and emergency workers. We believe that this is consistent with the above-stated FEMA position and the recommendations set forth in NUREG-0654. ^{18/}

Given the Commission's acceptance of the existing mode of contractual arrangements presently in use for the treatment of contaminated injured individuals during an emergency, who are not expected to number more than 25 or so both onsite and offsite, there is no basis for admitting a contention which hypothesizes a far greater number of onsite contaminated injured individuals.

The Licensing Board in Shoreham reached precisely this conclusion in rejecting a contention which failed to provide any basis for concluding that a nuclear accident at the facility "would result in more contaminated injured persons

^{17/} Id. at 12.

^{18/} Id. at 12-13 (emphasis added).

than [the local hospital] can accommodate."^{19/} Likewise, in the Diablo Canyon proceeding, the Licensing Board found that an estimate of onsite injuries "would be too speculative to be of significant aid in planning."^{20/}

III. Each Of The Proposed Contentions
Proposed Is Inadmissible As
Lacking In Specificity And Bases
Or Failing To Raise A Litigable
Issue.

Applicant now discusses each of the proposed contentions seriatim.

Contention VIII-1

This contention asserts that the Emergency Plan is inadequate because it does not encompass a spectrum of credible accidents for which emergency planning is required. Intervenor alleges that the postulated accident contained in Table 4-1 are design basis accidents and that the regulations and planning bases for emergency planning contemplate planning for accidents of much greater severity. This contention is lacking in basis inasmuch as the Emergency Plan is designed to cover the full spectrum of accidents and does not limit itself to the design basis accidents. The postulated accidents contained in Table 4-1 are merely

^{19/} Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1), Docket No. 50-322-OL, "Supplemental Prehearing Conference Order" (September 7, 1982) (slip op. at 22).

^{20/} Diablo Canyon, supra, at 61.

exemplary and should not be taken as an exhaustive list of the spectrum of conditions considered in the Plan. This contention should be denied for lack of basis.

Contention VIII-2

This contention asserts that the Applicant has not established an adequate emergency classification and action level scheme. Specifically, it contends in subsection (a) that initiating conditions of the plan include only 11 of the many accidents postulated in the Limerick FSAR. The 11 accidents listed in Section 4.2 of the Plan are representative of those types which are analyzed in the FSAR (See FSAR Chapter 15). LEA has failed to demonstrate that any accident analyzed in the FSAR is not encompassed by these 11 or other entries in Table 4-2, entitled "Planning Basis Summary." No deficiency has been shown. This subpart should be denied.

Subsection (b) of this contention asserts that the initiating conditions of Table 4.2 of the Plan do not include all example initiating conditions ("conditions") listed in Appendix 1 of NUREG-0654. Specifically, intervenor contends that conditions 3(b) and 12 of the Appendix I "Unusual Event" classification are not addressed in the Plan. Intervenor is incorrect with regard to condition 3(b), which is addressed in Section IIIa, Column 3 of Table 4.2 of the Plan. Condition 12 is a security event and is, in the Applicant's view, properly addressed only in the

Security Plan (See Applicant's Response to Question 810.17, Part A, Item 12 and Section 2.2.1).

Intervenor also contends that conditions 4, 8, 9, 10, 12, 14, 16, 17(b), 18(a), (b), (c), (e), and 20 of the Appendix I "Alert" classification are not addressed in Table 4.2 of the Plan. Reference to the Plan demonstrates, however, that these matters have, in fact, been addressed or are appropriately not considered as inapplicable to the Limerick design. Each of these separate items should be denied for lack of basis. With respect to condition 4, the plant design includes an MSIV-leakage control system. Therefore, this condition is inapplicable to Limerick and appropriately omitted. Condition 8 is addressed in Table 4-2, Item VIId as a Site Emergency, which is a more conservative response than required by Appendix 1 to NUREG-0654. Condition 9 has no radiological implications, inasmuch as such a seizure would not result in fuel failures for Limerick and is therefore inapplicable to this plant. See FSAR Section 15.3.3.

Condition 12 is addressed in Table 4-2, Item IVh. Condition 14 is caused only by loss of DC power and is covered consequently by Item VIId of Table 4.2 dealing with the loss of DC power. Condition 16 should be addressed, in Applicant's view, only in the Security Plan. In any event, this condition is addressed generally in Table 4-2, Item Xb. Condition 17(b) is addressed in Section B, Item 17(b) of the Applicants' Response to Question 810.17. Conditions 18(a),

(b), (c), (e) are encompassed by Table 4-2, Item Xb. Condition 20 is addressed in Table 4-2, Item VIIIA. Conditions 17(c) and 17(d) are addressed in Table 4-2 at Items Xb and XIIIE, respectively.

Intervenor also contends that example initiating conditions 1, 2, 8, 9, 10, 12, 14 and 15(b) of the Appendix 1, "Site Area Emergency" classification are not addressed in Table 4-2. This assertion is incorrect. Conditions 1 and 2 are addressed in Table 4-2, Items Ve, and Items IIIC and IVb. Condition 8 is covered by Table 4-2, Item Ia. Condition 9 is covered by the response to Question 810.17, Part C, Item 9 which specifies that declaration of the appropriate emergency response level will be included in the Transient Response Implementation Procedure. Condition 10 is addressed in Table 4-2, Item IVb. Condition 12 is caused by loss of DC power and is, therefore, covered by Item VIId of Table 4.2. Condition 14 will be handled by the Security Plan. (See Applicant's Response to Question 810.17, Part C, Item 14.) Condition 15(b) is addressed in Applicant's Response to Question 810.17, Part C, Item 15(b), which indicates that the possibility of flooding is not a plausible occurrence for this facility due to plant siting.

Finally, this contention asserts that example initiating conditions 2, 3, 4, 6 and 7 of the Appendix 1 "General Emergency" classification are not addressed in Table 4.2 of the Plan. Condition 2 is covered by Items IID and IVc of Table 4-2. Condition 3 is handled per the Security Plan.

See Applicant's Response to Question 810.17, Part D, Item 3. Condition 4(a) is covered by Table 4-2, Item IVc. Condition 4 is handled under Item IVd. per the protective action determination. Conditions 6a-d and 7 are covered by the response to Question 810.17, Part D, Items 6a-d, and Item 7, respectively, which provide that the declaration of a general emergency will be included in the Transient Response Implementation Procedure.

Thus, this contention should be denied in its entirety.

Contention VIII-3

This contention alleges that the Plan does not identify and establish the onsite monitoring systems that are to be used to initiate emergency measures. Table 4-2 identifies these systems. As the Licensing Board in Shoreham held, neither the regulations nor NUREG-0654 require Applicant to designate the specific monitors to be used, but rather only the monitoring systems.^{21/} Therefore, this contention is without basis or applicability to the Limerick Station and should be denied.

Contention VIII-4

This contention asserts that the Plan fails to demonstrate establishment of a mechanism for direct notification of protective action recommendations to the offsite authorities responsible for implementing protective measures

^{21/} Shoreham, supra at 47-48.

within the plume exposure EPZ. To the contrary, Section 6.4.1.2c provides that "[t]he Interim Emergency Director, Emergency Director and Site Emergency Coordinator will provide assessment information to the BRP [Bureau of Radiation Protection]." In turn, the BRP will make recommendations to the Pennsylvania Emergency Management Agency ("PEMA") in regard to protective actions for the public. Section 6.4.1.2c further states that "[i]n the event that BRP is unavailable, these PECO positions will provide protective action recommendations to PEMA and the Counties."

Insofar as the proposed contention implies that a definite time should be fixed for making protective action recommendations, the Board in the Three Mile Island proceeding has held to the contrary, noting that "there are no requirements in the new emergency planning regulations and no criteria in NUREG-0654 stipulating that accident assessment time be set forth in emergency plans or emergency procedures."^{22/} This contention should be denied as without basis.

Contention VIII-5

In this contention LEA asserts that the Plan fails to comply with the mandate requiring an applicant to set forth

^{22/} Three Mile Island, supra 14 NRC at 1571. The Board added that utilization of the accident classification scheme and accident assessment concept would provide "rapid accident assessment," thereby rendering accident assessment times "neither practical nor useful." Id.

the bases for a choice of recommended protective actions for the plume exposure pathway. The BRP regulatory guidelines on protective actions for the plume exposure pathway are set forth in Applicant's Response to Question 810.54 and referenced in Section 6.4.1.2c and, as such, are part of the Plan. The methodology for calculation of offsite doses is properly part of the implementing procedures and therefore irrelevant to the adequacy of the Plan. Applicant submits that there is no basis for this contention and it should be denied.

Contention VIII-6

This contention alleges that the provisions for emergency notification (a) do not demonstrate that the respective response organizations have agreed upon such notification procedures, (b) fails to make adequate provisions for followup messages to offsite authorities and (c) does not provide for notification within 15 minutes from the time at which operators recognize that events have occurred.

With regard to subsection (a), agreement as to the acceptability of the notification of response organizations is a matter properly determined once the offsite plans are submitted. The acceptability of the notification procedures will be readily apparent when the offsite plans are submitted.

With regard to subsection (b), Applicant maintains an open line to offsite authorities and, therefore, followup message forms are unnecessary under this arrangement.

The contention contained in subsection (c) poses a matter of semantic difference only. The Plan provides that the Shift Superintendent in the control room is responsible for declaring an emergency. See Section 5.2.1.1. Consultation of the operator with the Shift Superintendent will not result in a significant time lapse. Applicant does not see any issue here to be litigated. Each part of this contention lacks any basis and should be denied.

Contention VIII-7

This contention asserts that there are deficiencies in the plant staff's ability to respond to emergency situations. Specifically, subsection (a) alleges that the Plan fails to establish a line of succession for the Emergency Coordinator position beyond a single alternate. This contention lacks basis. The Interim Emergency Director is the Shift Superintendent; his successor is the Shift Supervisor. See Section 5.2.1.1. The individuals filling the roles of Interim Emergency Director and alternate are part of the Station shift complement and onsite at all times. See Section 5.2.1.1. This comports with the command structure used at other facilities as approved by the NRC.^{23/} The designated Interim Emergency Director would fulfill this function until relieved by the Emergency Director.

^{23/} See, e.g., Waterford, supra, at 18; Three Mile Island, supra, at 1469.

Therefore, it is appropriate to have a single alternate for the position of Emergency Director.

Subsection (b) alleges that the arrangement for the Peach Bottom Station Superintendent to serve as Alternate Site Emergency Coordinator is inadequate because of the time it would take him to travel to either Limerick or the Emergency Support Center in PECO's Philadelphia offices. Whatever merit this allegation may have had, the Electric Production Department has been reorganized to establish a Nuclear Services Division under the Nuclear Generation Division. The PECO Superintendent of Nuclear Services is now the Alternate Site Emergency Coordinator. The new Alternate Site Emergency Coordinator is based in and will have immediate access to the PECO headquarters support Emergency Control Center and prompt access to Limerick. This matter will be clarified by an amendment to the Plan.

Intervenor's contentions in subsections (c)(1) and (c)(2) are based upon an apparent misreading of the Plan. Figure 5-5 and Table I-1 indicate that there will be two Health Physics Technicians per shift. With respect to the number of control room operators per shift, the Plan is more conservative than the requirements of NUREG-0654.

Subsection (c)(3) asserts that the 30 and 60 minute augmentations of minimum staffing as set forth in the Plan do not comply with NUREG-0654, Table B-1. LEA has failed to

show any specific lack of compliance with the requirements of NUREG-0654.^{24/} This contention should be denied.

Subsection (d) alleges that NUREG-0654, Table B-1 requires in-plant surveys to be performed by Health Physics Technicians, while Table I-1 of the Plan has these surveys performed by Radiation Chemistry Technicians. Table I-1 contains a typographical error placing the Health Physics Technician in-plant survey function adjacent to the listing of Radiation Chemistry Technician functions. The Plan will be revised accordingly. No litigable issue exists.

Subsection (e) alleges that the non-delegable responsibilities imposed upon the Interim Emergency Director or Emergency Director by Section 5.2.1.1 are excessive. This section did not clearly distinguish which of the listed responsibilities are delegable. Only items (d) and (g) of Section 5.2.1.1 should have been indicated as non-delegable.

Contention VIII-8

This contention alleges inadequate emergency facilities and equipment to support emergency responses. Specifically, subsection (a) contends that various records are not accessible to the Technical Support Center ("TSC"). The list of records contained on page 7-2 are those physically stored

^{24/} A similar challenge was rejected in Three Mile Island, supra, 14 NRC at 1470-71.

within the TSC. Other records are stored at the administration building which is physically adjacent to the TSC.

Intervenor contends in subsection (b) that the description in the Plan of the Emergency Operations Facility ("EOF"), TSC, Operational Support Center ("OSC") and emergency equipment and supplies are insufficient. This contention is completely lacking in specificity regarding Limerick. Not a single example is given of any inadequacy in these descriptions. While additional detail will be provided, Applicant's Response to Question 810.30 describes the various facilities and ensures that the substantive aspects of NUREG-0696 are covered. This contention is nonspecific and should be denied.

In subsection (c), intervenors contend that the Plan fails to set forth the procedures for maintenance of the emergency facilities. This contention is incorrect. The Plan outlines, inter alia, various exercises and drills which are conducted to test the emergency facilities. See Sections 8.1.2 and 8.3. Intervenors have not shown any inadequacies in these areas nor have they pointed out any specific special maintenance which is required. This contention similarly lacks specificity and should be denied.

Contention VIII-9

This contention asserts that the Plan does not provide for prompt communications among the principal response organizations. Intervenor has not, however, set forth with specificity any alleged deficiencies. In subsection (a), it

is alleged that the Plan fails to establish reliable backup means of communication. In fact, as shown in Figure 7-2, the Plan provides for dedicated phone lines, radio communications, and a variety of telephone lines. These systems provide reasonable assurance that communications requirements have been met.^{25/} No issue for a hearing has been raised.

Subsection (b) contends that the Plan contains no provision for communication by Applicant between the EOF and the Radiological Monitoring Team Assembly Area ("RMTAA"). The RMTAA assembly point is the TSC. Pursuant to Section 7.1.3, the TSC is a primary communications center. Therefore, communications between the EOF and the RMTAA is assured. This contention lacks basis and should be denied.

Intervenor contends in subsection (c) that the Plan does not demonstrate the ensured existence of a coordinated communications link for the fixed and mobile medical support facilities. Both the fixed and mobile medical support facilities will be contacted by normal telephone links. Any ambulances will be contacted via their offsite dispatcher. This aspect of the contention should also be denied.

^{25/} See Southern California Edison Company (San Onofre Nuclear Generating Station, Units 2 and 3), LBP-82-39, 15 NRC 1163, 1202-03 (1982), aff'd, ALAB-717, 17 NRC ____ (March 4, 1983).

With respect to the contention in subsection (d) that testing provisions for parts of the communications system are inadequate, Applicant notes that these communications systems are in use continually, e.g., Pennsylvania State Police, Conrail, and are tested in this manner on a regular basis.^{26/} See also Section 8.1.2.5. Also, the communications system will be tested as part of the offsite emergency plan. The NRC Staff, of course, has ongoing responsibility to assure itself of the continuing reliability of the emergency communications system.^{27/} This aspect and all of Contention VIII-9 are without basis and should be denied.

Contention VIII-10

This contention asserts that the agreements with local authorities do not delineate the authority and responsibility of the contracting agencies. This contention is lacking in specificity. There is not a single example of any missing parameter. These contentions are nonspecific, without basis, and should be denied.

Subsection (b) of this contention asserts that the Plan contains no written agreement for support services from the Hospital of the University of Pennsylvania. The Plan generally describes the relationship between the Applicant and the Hospital. The agreement will be provided later.

^{26/} See San Onofre, supra, at 1203.

^{27/} Diablo Canyon, supra at 39.

However, no specific deficiency in the planning process has been alleged.

Contention VIII-11

Intervenor contends that Linfield Fire Company does not have adequate equipment to respond to fires which may occur at the facility and asserts that agreements should be reached with other fire companies. No basis for alleging that the existing fire protection is inadequate has been shown. Nonetheless, the Plan is, in fact, being revised to show further backups. This contention, too, should be denied.

Contention VIII-12

This contention asserts that the Plan does not demonstrate that arrangements for medical services have been made for contaminated injured onsite individuals. Specifically, subsection (a) asserts that it has not been demonstrated that the medical services and facilities described in Sections 5.3.2.1 to 5.3.2.5 are adequate for the potential number of persons contaminated by the spectrum of credible accidents. Subsection (b) contends that the Plan does not demonstrate adequate arrangements for the transportation of radiological accident victims to medical support facilities.

In the San Onofre proceeding, discussed supra, the Commission accepted the estimate that 1 to 25 contaminated injured individuals in a radiological emergency, both onsite and offsite total, might require immediate medical assistance. Thus, with regard to onsite contaminated injured

individuals, where a lesser number would be involved, intervenor has shown no deficiency with regard to the planning effort. This contention should be denied.

Contention VIII-13

This contention alleges that the Plan does not contain arrangements for requesting and using federal response capability. The only federal agency with an onsite function is the NRC. Figure 5.3 shows that the NRC will be called directly by PECO in the event of an emergency at Limerick. The functions of any agencies relevant to offsite planning will be discussed in the offsite plan.

With respect to subsection (b), which contends that the Plan does not sufficiently identify the laboratory capabilities and availabilities for augmented response to emergencies, Applicant notes that Section 7.3.2 details a full range of monitoring capabilities.

Subsection (c) contends that the specific assistance to be rendered by the nuclear industry and the States of Maryland, New Jersey and Delaware are not identified. As discussed above, only the NRC would provide any onsite assistance. Contact with these States, if any, will be through PEMA. Section 5.3.4 details the assistance to be rendered by the nuclear industry in the event of an emergency. The details of this assistance are a formality and will be spelled out in letters of agreement when executed. This contention should be denied.

Contention VIII-14

Generally, intervenor contends that the Plan does not demonstrate adequate capability for assessing and monitoring offsite releases during a radiological emergency. Specifically, intervenor contends in subsection (a) that the Plan does not identify with particularity the plant system and effluent parameter values characteristic of a spectrum of off normal conditions and accidents. However, the limits for effluents will be set forth in the Technical Specifications for the facility. The values themselves in Column 3 of Table 4-2 are details that need not be filled in at this time. The first column of Table 4-2 sets forth the criteria for setting these values.

Subsection (b) asserts that the Plan does not demonstrate that adequate arrangements have been made to locate and track an airborne radioactive plume emanating from the plant. Plume location and tracking activities are primarily offsite responsibilities.^{28/} In any event, Sections 6.2.4, 7.3.1 and 7.3.2 describe the capability of Applicant for taking surveys, either on or offsite.

Subsection (c) contends that the procedures for analyzing offsite dosimetry and calculating offsite doses have not been provided. Such implementation procedures, however,

^{28/} See generally Southern California Edison Company (San Onofre Nuclear Generating Station, Units 2 and 3), ALAB-717, 17 NRC ____ (March 4, 1983) (slip op. at 44-46).

like other procedures to be developed, do not constitute a part of the Plan itself and are not properly reviewable.

Intervenor also contends in subsection (d) that the Plan does not describe the monitoring instruments to be used and their capabilities. Appendix E of the Plan provides a general description of these instruments that is sufficient to comply with NUREG-0654. As noted in the discussion of Contention VIII-3, supra, this description of equipment and personnel is all that is required to comply with NRC regulations.

Subsection (e) asserts that the Plan does not provide adequate onsite capability and resources to provide initial values and continuing assessment throughout the course of an accident. While details of the system will be provided later, the commitment to provide such system is sufficient under the regulations, as noted above.

In subsection (f), intervenor contends that adequate methods and techniques to be used for determining the source term of releases of radioactive material within plant systems, and the magnitude of the release of radioactive materials based on plant system parameters and effluent monitors, have not been demonstrated. Again, no litigable issue exists. A description of the instruments used for these purposes is contained in the FSAR. See FSAR Sections 11.5.5 and 11.5.2.3.1. Actual methods for reducing samples to dose values will be discussed in the procedures.

Intervenor next alleges in subsection (g) that the Plan does not demonstrate the capability of acquiring and evaluating meteorological information and lacks provisions for access to meteorological information by the EOF and the TSC. It also asserts that the Commonwealth of Pennsylvania does not have available meteorological data processing interconnections which would permit its independent analysis. While it is noted that the proposed system will have the capability for remote interrogation, further information will be supplied as stated in Applicant's Response to Questions 810.35 and 810.42.

Intervenor alleges in subsection (h) that the Plan does not demonstrate the methodology for determining the release rate and projected doses if the instruments used for assessment are off-scale or inoperable. This contention lacks any basis. Section 6.2.3 et seq. and Applicant's Response to Question 810.44 describe the methods by which readings and samples for assessment will be obtained under these circumstances. The methodology itself need not be described in the Plan.

Intervenor alleges in subsection (i) that the Plan does not demonstrate the specific capability and resources for field monitoring within the plume exposure EPZ. To the contrary, Section 5.2.2.2.1 of the Plan describes the Radiation Protection Team. See also Sections 6.2.4 and 7.3.2 for a description of its capabilities and resources

for field monitoring within the plume exposure EPZ. Nothing more is required.

In subsection (j), intervenor alleges that the Applicant has not demonstrated a capability to detect and measure airborne radioiodine concentrations of 10^{-7} u Ci/cc in the plume exposure EPZ under field conditions. The Applicant's Response to Question 810.46 contains a typographical omission of the superscript " $^{-7}$ " which will be supplied. Thus, there is no issue to litigate here.

Contention VIII-14(k) is substantially the same as the contention raised in subsection (e). As such, it is deficient and should be denied.

Contention VIII-15

Intervenor contends in subsection (a) that the Plan does not contain adequate provisions for evacuation routes and transportation of onsite individuals to a suitable offsite location. Applicant notes that it does not transport individuals offsite. Instead, they are directed to the Limerick Information Center or Emergency Support Center from which point they would utilize the same routes as any member of the general public.

Next, in subsection (b), intervenor contends that the Plan does not provide for adequate radiological monitoring of individuals evacuated from the site. To the contrary, Section 6.4.1.1(e) describes the process by which persons evacuated from the site are to be monitored. Radiological monitoring of personnel is a routine health physics matter

and intervenor has not shown why monitoring cannot be accomplished as planned. LEA points to no requirement that all employees at a site have dosimeters or how individuals other than working directly with the reactor would acquire a neutron dose.^{29/} This subsection is lacking in specificity.

In subsection (c), intervenor contend that the Plan does not distinguish between essential and non-essential personnel. The distinction sought by intervenor is self-evident. Section 6.4.1.1.c provides the procedures by which personnel are to be evacuated from the site in the event of an emergency. Individuals who have a role in emergency response are aware of their responsibilities. Those not having a response role are nonessential and would be evacuated, if necessary.

Subsection (d) concerns emergency implementing procedures for decontamination, which have yet to be written. Appendix D of the Plan lists decontamination as an implementing procedure to be developed to reflect the guidance and criteria established in the Plan and NUREG-0654. Section 8.1.2.6 of the Plan specifies that Radiological Monitoring/Health Physics Drills will include coverage of the content of implementing procedures. Section 6.4.1.1.e addresses the monitoring and decontamination of evacuees at

^{29/} It is noted that nothing in NUREG-0654, Criterion J-3 pertains to a neutron dose.

the assembly area. Section 6.5.2 states that "on-site personnel decontamination facilities for emergency conditions include showers and sinks . . . and cleaning agents" Special decontamination materials and personnel decontamination procedures are available in this area. Table 7-1 specifies that the site evacuation assembly areas are the Emergency Support Center and/or the Limerick Information Center, which will have decontamination capabilities. Further description of "assembly areas" and criteria for selection and emergency equipment is contained in Section 7.4. A description of the Emergency Support Center is contained in Section 7.1.5. No deficiency in these fundamental planning concepts has been shown, nor it is necessary for the Plan to contain each implementing procedure for decontamination. This contention should therefore be denied.

With respect to subsection (e), intervenor contends that the Plan does not demonstrate a capability to account for all individuals onsite at the time of an emergency within 30 minutes. Section 6.4.1.1.d provides a procedure for personnel accountability. Applicant's Response to Question 810.51 provides that the implementing procedures will be written with a goal of 30 minutes accountability. Having committed to meet this objective and to develop implementing procedures, the Plan is sufficient.

In subsection (f), intervenor contends that the Plan does not provide for each person remaining or arriving

onsite during the emergency to have individual respiratory protection, protective clothing and individual thyroid protection. Applicant's Response to Question 810.30 states that the TSC, where persons coming onsite would gather, will provide the same radiological habitability as the control room under accident conditions. See also Section 6.4.2. The response further states that monitoring systems will be provided in the TSC to indicate airborne radioactivity concentration continuously. This subsection also lacks a sufficient basis.

Contention VIII-16

Generally, this contention asserts the inadequacy of means for controlling radiological exposures for emergency workers in an emergency. Specifically, intervenor contends in subsection (a) that while the Plan provides for distribution of potassium iodide ("KI") "per approved procedure," these procedures are not presently available for review. This assertion is in error. First, the distribution of KI is discussed in the Plan. See Section 6.4.2. KI will be stored onsite. The detailed procedures about where it will be stored and when distributed need not be included in the Plan. Applicant's Response to Question 810.53 provides that KI distribution may begin within one hour. LEA has not shown that this course of action does not meet any NRC planning requirement.

In subsection (b), intervenor contends that the Plan contains inadequate procedures with respect to radiation

exposures for volunteers permitted onsite to carry out life-saving and other emergency activities. Table 6.1 establishes the exposure criteria for emergency workers. As noted below, ordinary health physics procedures will be utilized to determine dose levels. Nothing more need be provided.

In subsections (c), (d) and (e), intervenor advances contentions dealing with the information concerning radiation risks available to emergency workers, the capability to determine the doses received by emergency workers and means for radiological decontamination of emergency personnel wounds, respectively. FSAR Section 13.2.1.4 provides that each individual with a designated onsite responsibility during a radiological emergency must have a course concerning radiation risk. Ordinary health physics procedures will be used to determine the doses received by emergency workers and to establish adequate means for radiological decontamination of emergency personnel wounds.

In subsection (f), intervenor questions the procedures and capability for onsite contamination control, including area access control, drinking water and food supplies and criteria for permitting return of areas and items to normal use. No basis or specificity is provided in this contention. Onsite contamination control measures will employ normal health physics procedures. The return of areas and items to normal use is a long-term consideration that can be

decided best when the situation arises, using the general guidance of health physics criteria.

Subsection (g) asserts an inadequate capability for decontamination of relocated onsite personnel, e.g., the provision of extra clothing and decontaminants suitable for expected contamination, including radioiodine contamination of the skin. Applicant's Response to Question 810.59 describes the personnel decontamination kits that will be available at predetermined places. Appendix E discusses the availability of anti-contamination clothing. See also Section 6.4.2. In addition, normal health physics procedures will be used. Thus, each aspect of this contention lacks basis and should be denied.

Contention VIII-17

Generally, this contention asserts that the Plan has inadequate provisions for recovery and reentry after the occurrence of a radiological emergency. Specifically, subsection (a) asserts that these provisions consists of titles and personnel functions. NUREG-0654, Criteria M.1 requires general plans and procedures for recovery and re-entry as appropriate. The Plan contains such general plans and procedures in Section 9. Additionally, Section 5 addresses the specific organization which will be established for recovery and re-entry. Further plans and procedures specific to the conditions at the time of recovery and re-entry will be developed as needed. No deficiency has been shown.

As the Licensing Board stated in the San Onofre proceeding:

The NRC regulation requires that "general" plans for recovery and reentry be developed. In recognition of the expected sequence and pace of events following an evacuation, the regulation does not contemplate the kind of detail in planning required for an emergency response.

.

Unlike evacuation, reentry should not (at least in most cases) be constrained by time. Those things that will have to be done before the return of people to their homes is advisable will depend on the radiological conditions that exist in the area evacuated. In this sense, plans must -- and should -- be ad hoc. ^{30/}

Similarly, in Diablo Canyon, the Licensing Board concluded that no danger to the public health and safety exists if such details have not been fleshed out in advance because "recovery and reentry operations do not deal with immediate life threatening situations and . . . assistance from Federal agencies such as EPA and DOE would be available" at that time.^{31/} The Licensing Board in Shoreham also rejected a similar contention.^{32/}

^{30/} San Onofre, supra, 15 NRC at 1207.

^{31/} Diablo Canyon, supra at 64.

^{32/} Shoreham, supra at 59-60.

Subsection (b) asserts that the Plan does not describe the means by which decisions to relax protective measures will be reached. To the contrary, the means by which such decisions are to be made are described in Sections 6.4.1.1g and 9.0 which provides a general reentry matrix. Further details can be filled in as necessary. There is no requirement that this be done now.

Subsection (c) asserts that the Plan does not specify the method to be used for periodically estimating the total population exposure. Applicant's Response to Question 810.60 states that a method for periodically estimating total population exposure will be provided shortly before the completion of fuel loading, as part of the implementing procedures. This response is sufficient.

Contention VIII-18

This contention asserts that the Plan does not demonstrate that adequate radiological emergency response training will be provided those who may be called upon to perform onsite functions in an emergency. Applicant's Response to Question 810.63 provides that Applicant will train personnel required by the Plan. The response further provides that the procedures for training these personnel will be developed as the training needs are identified. Table 8-1 describes the plan for training onsite radiological emergency response workers. There is no need to provide the details of this training in the Plan.

Contention VIII-19

Intervenor contends in subsection (a) that Applicant has not provided for proper training of the individuals involved in the planning effort. Applicant notes, however, that its emergency planning personnel have taken emergency training courses and that this information will be reflected in the Plan.

In subsection (b), intervenor contends that the Plan does not demonstrate the independence of the organization or persons responsible for annual review of emergency preparedness at Limerick. It is also asserted that no provision is made for the results of reviews and recommendations to be reported to State and local organizations and retained for five years. As noted in Applicant's Response to Question 810.67, procedures will be developed to indicate that an annual independent audit of emergency preparedness will be conducted. These procedures will be provided to the NRC for its review in conjunction with completion of quality assurance plans and procedures. This commitment is sufficient to meet NRC requirements for emergency planning.

Contention VIII-20

Intervenor contends that the Plan does not demonstrate that adequate periodic exercises will be conducted to evaluate major portions of emergency response capabilities. Specifically, subsection (a) asserts that there are no provisions for an exercise starting between 6:00 p.m. and midnight and another between midnight and 6:00 a.m. once every six years and for the conduct of unannounced

exercises. To the extent that such exercises are required by FEMA (and acceptable to the involved jurisdictions), they will be held. There is no further commitment Applicant could make.

Subsection (b) asserts that provisions for testing of communications should require quarterly testing with States within the ingestion pathway. By agreement with the Commonwealth of Pennsylvania, Applicant is not responsible for quarterly testing of communications with States within the ingestion pathway. PEPA has assumed this responsibility.

Subsection (c) asserts that the annual medical emergency drill provision of the Plan is faulty because it does not specify ambulance participation. It is the Applicant's intent to have ambulance participation in its annual medical emergency drill. If this is not already clear, it will be clarified.

Subsections (d) and (g) essentially contend that the Plan does not demonstrate that either the Applicant or the Commonwealth of Pennsylvania will conduct semiannual health physics drills in addition to an annual exercise as specified by NUREG-0654. It is PECO's intent to conduct semiannual health physics drills specified by NUREG-0654, one of which may be conducted in conjunction with the annual exercise. Intervenor has not demonstrated that the Plan as it now stands is deficient under applicable criteria.

Subsection (e) contends that the Plan does not provide for health physics drills which include required analysis of

in-plant liquid samples with actually elevated radiation levels. It is the Applicant's position that this practice would violate 10 C.F.R. §20.1(c) and will not be followed.

Subsection (f) asserts that exercise scenarios have not been submitted by either Applicant or State and local emergency response organizations. However, the NRC has determined in the final rule on emergency planning that exercise scenarios are not needed until a plant reaches the five percent power level.^{33/} Moreover, exercise scenarios are not developed until just before the conduct of an exercise and are in any event kept confidential.

Subsection (h) contends that the Plan's provisions for annual exercises do not indicate whether the local emergency response organizations will be required to be activated or simply notified. This is properly a matter for offsite emergency planning and should not be considered here. In any event, the proposed contention fails to allege any deficiency in the Plan inasmuch as "[t]he NRC's emergency planning rules require annual participation in exercises of local emergency response organizations in the plume EPZ sufficient to demonstrate that necessary resources and

^{33/} On July 13, 1982, the NRC amended its regulations in 47 Fed. Reg. 30232 to provide that emergency preparedness exercises are part of the preoperational inspection and are thus required prior to operation about 5% of rated power, but are not required for a Licensing Board, Appeal Board or Commission licensing decision.

procedures are adequate but this does not mean that each element of each emergency response organization must participate What is called for is a testing of representative elements of emergency response, not an exercise of every element for every emergency response organization."^{34/} This contention lacks any basis and should be denied.

Conclusion

For the reasons discussed above, the onsite emergency planning contentions should be denied.

Respectfully submitted,

CONNER & WETTERHAHN

A handwritten signature in dark ink, appearing to read "Mark J. Wetterhahn", written in a cursive style.

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July 5, 1983

^{34/} Three Mile Island, supra, 14 NRC at 1696-97.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)	
)	
Philadelphia Electric Company)	Docket Nos. 50-352
)	50-353
(Limerick Generating Station,)	
Units 1 and 2))	

CERTIFICATE OF SERVICE

I hereby certify that copies of 'Applicant's Answer to Limerick Ecology Action's Contentions on Onsite Emergency Planning,' dated July 5, 1983, in the captioned matter have been served upon the following by deposit in the United States mail this 5th day of July, 1983:

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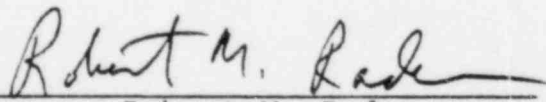
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